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Journal of the Asiatic
Society of Bengal







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JOURNAL
OF THE
ASIATIC SOCIETY
OF
BENGAL.

EDITED BY
THE SECRETARY AND SUB-SECRETARY.

VOL. XIII.

PART I.—JANUARY TO JUNE, 1844.

Nos. 145 to 150.

NEW SERIES.

"It will flourish, if naturalists, chemists antiquaries, philologers, and men of science, in different parts of *Asia* will commit their observations to writing, and send them to the Asiatic Society, in Calcutta; it will languish if such communications shall be long intermitted; and will die away if they shall entirely cease."—SIR WM. JONES.

CALCUTTA:
BISHOP'S COLLEGE PRESS.

1844.

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OFFICERS OF THE ASIATIC SOCIETY FOR 1844.



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The Honorable W. W. Bird, Esq.

Vice Presidents, {
 The Right Revd. The Lord Bishop of Calcutta.
 The Honorable Sir J. P. Grant.
 The Honorable Sir H. Seton.
 H. W. Torrens, Esq.

Secretary, H. W. Torrens, Esq.,

Sub-Secretary, H. Piddington, Esq.



Committee of Papers.

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Dr. J. Hæberlin,		S G. T. Heatly, Esq.
Lieutenant A. Broome, B. H. A.		N. B. E. Baillie, Esq.
C. Huffnagle, Esq.		W. Grant, Esq.



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*Curator Geological and Mineralogical De-
 partments and Museum of Economic
 Geology*, } H. Piddington, Esq.

Librarian, Dr. E. Roer.

Accountant and Assistant to the Secretary, Mr. W. H. Bolst.

Assistant Librarian, Mr. W. Fenwick.

Taxidermist, J. Nicolas.

Treasurers, Bank of Bengal.

Agent in London, Professor H. H. Wilson, India House.

Agent in Paris, Major A. Troyer, 55, Rue de la Pepiniere.

Booksellers and Agents in London,. Messrs. W. and J. Allen, Leadenhall street.

By an oversight, the list of Members of the Society intended for the present No. was published with No. CXLIV. Another is now given, and the former one may be cancelled.

LIST OF MEMBERS

Of the Asiatic Society of Bengal, on 1st January, 1844.

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|--|---|
| <p>Anderson, Major W.
 Avdall, J. Esq.</p> <p>Bird, Hon'ble W. W.
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 Bayley, Esq. H. V.
 Bogle, Capt. A.
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 Bigge, Lieut. H. L.
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 Houstoun, Esq. R.
 Hæberlin, Dr. J.
 Hickey, Lieut. C. E.
 Hodgson, Esq. H. B.
 Hutton, Capt. T.</p> <p>Irvine, Lieut. Col. A. (c. v.)</p> <p>Jackson, Esq. W. B.
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 Jameson, Dr. W.</p> <p>Karr, Esq. W. Seton
 Kistnoth Roy, Bahadoor, Rajah</p> <p>Lushington, Esq. G. F.
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 Long, Rev. J. Associate Member.</p> <p>Maddock, Hon'ble T. H.
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 O'Shaughnessy, Esq. W. B.

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 Ramgopaul Ghose, Baboo
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 Shortrede, Capt. R.
 Stephen, Capt. J. G.
 Syud Keramat Ullee, Associate Member.

 Thomason, Hon'ble J.
 Tickell, Lieut. S. R.
 Taylor, Lieut. Col. T. M.
 Torrens, Esq. H.
 Trevor, Esq. C. B.
 Torrens, Esq. J. S.

 Winchester, Rev. W.
 Walker, Esq. H.
 Wade, Lieut. Col. Sir C. M.
 Willis, Esq. J.
 Withers, Rev. Principal G. U.
 Wallis, Rev. A.
 Wilcox, Major R.
 White, Major M. G.

 Young, Lieut. C. B.
-

Rules of the Asiatic Society.

The following is an abstract of the rules of this Institution which are now in force, including those printed in the Appendix to the sixth and subsequent volumes of the Society's Transactions.

Original Rules adopted from the Founder's Discourse, 15th February, 1784.

1.—The Institution shall be denominated the Asiatic Society, the bounds of its investigations will be the Geographical limits of Asia, and within these limits its enquiries will be extended to whatever is performed by man or produced by nature.

2.—Weekly Meetings shall be held for the purpose of bearing Original Papers read on such subjects as fall within the circle of the Society's enquiries.

3.—All curious and learned men shall be invited to send their Tracts to the Secretary, for which they shall immediately receive the thanks of the Society.

4.—The Society's Researches shall be published Annually, if a sufficiency of valuable materials be received.

5.—Mere Translations of considerable length shall not be admitted, except of such unpublished Essays or Treatises as may be transmitted to the Society, by Native Authors.

6.—All questions shall be decided on a Ballot, by a Majority of two-thirds, and nine Members shall be required to constitute a Board for such decisions.

7.—No new Member shall be admitted who has not expressed a voluntary desire to become so, and in that case, no other qualification shall be required, than a love of knowledge, and a zeal for the promotion of it.

Subsequent Resolutions of the Society which are in force.

8.—The future Meetings of the Society shall be held on the first Wednesday of each month; at half-past Eight o'clock in the Evening.

9.—If any business should occur to require intermediate Meetings, they may be convened by the President, who may also, when necessary, appoint any other day of the week, instead of Wednesday for the stated Meetings of the Society.

10.—As it may not always be convenient for the President to attend the Meetings of the Society a certain number of Vice Presidents shall be elected annually.

11.—In case the President, and the Vice Presidents are absent at any Meeting, a quarter of an hour after the fixed time, the senior Member present shall take the Chair for the Evening.

12.—Every Member of the Society shall have the privilege of introducing as a visitor, any gentleman who is not usually resident in Calcutta.

13.—With a view to provide funds for the necessary expenses of the Society, an Admission Fee shall be established to consist of two gold mohurs, payable by every Member on his election, and each Member of the Society, resident in India (Honorary Members excepted) shall also contribute a gold mohur, quarterly, in the first week of January, April, July and October. Any Member neglecting to pay his Subscription for half a year, after it becomes due, to be considered as no longer a Member of the Society.

14.—All Members returning to India shall be called upon to pay their Subscription as usual from the date of their return.

15.—A Treasurer shall be appointed.

16.—In addition to the Secretary, an Assistant Secretary and a Librarian shall also be appointed.

17.—A Committee of Papers shall be appointed, to consist of the President, Vice Presidents, Secretary, and nine other Members to be elected annually, and any number no less than five, shall be competent to form a Committee.

18.—This Committee will select from the papers communicated to the Society, such as may appear proper for publication, and superintend the printing of the Society's Transactions.

19.—The Committee of Papers shall be authorized to draw upon the Treasurer for any sums requisite to defray the expense of publishing the Translations, and an order signed by a Majority of the Committee, will be a sufficient warrant to the Treasurer for paying the same.

20.—The Committee of Papers is authorized to defray any small contingent expenses on account of the Society which they may deem indispensable.

21.—Every Subscribing Member of the Society, on application, shall be furnished with a copy of such volumes of the Researches as may be published whilst he continues a Member, in return for his contributions, without any further payment.

22.—With a view to the more general circulation of the Asiatic Researches in India, the price of the 12th and future volumes, to Non-subscribers, shall be fixed at a gold mohur, and if several volumes of different years be purchased together, they shall be sold at 10 rupees each.

23.—The Agents of the Society in England shall be desired to purchase, and forward for the Society's Library, Books of Science and Oriental Literature, published in Europe, taking care that those purchases at no time exceed the funds arising from the sale of the Society's publications.

24.—The Committee of Papers shall be requested to furnish the Agents in Europe with such further instructions as may appear requisite for their guidance in the selection of books proper to be placed in the Library of the Society.

Library.

25.—The Library is open from 10 to 4 o'clock, between which hours, the Assistant Librarian is to be in attendance every day, Sunday excepted.

26.—None but the Members of the Society are allowed to borrow Books from the Society's Library, and no book is to be lent out of Calcutta without especial permission from the Committee of Papers.

27.—Books are to be borrowed by written or personal application to the Secretary; in either case, the person applying is to furnish a written receipt specifying the name of the work, and the time for which it is borrowed, at the expiration of which he is to return the book borrowed, or renew his application for an extended loan of it.

28.—The receipts for the Books shall be filed, and a Record kept of the Books lent out, to whom, and when lent out, and when returned.

29.—A list of the Books in the Library, and a Register of those lent out, are to be kept ready for inspection.

30.—All persons borrowing Books are to be answerable for their safe return, or are expected to replace them if injured or lost.

31.—The Librarian should be authorized to call in any work which is detained beyond the time fixed by the preceding rule.

32.—All works borrowed from the Library, should be returned once a year, viz, the first of October, in order to enable the Librarian to have the most efficient control over them, and to report to the Secretary on the state of the Library.

33.—Valuable manuscripts should not be removed from the Library, and no work from the Oriental division of the Library can be borrowed by Native gentlemen, not Members of the Society without a special order of the Secretary.

34.—All books being books of general or special reference in the various branches of Natural History in the departments of the Zoological, Geological, and Mineralogical Curators, to be understood by the Librarian to be Books of reference for the use of those officers, and as such, not to be lent out of the Library.

35.—The Curators are farther to be allowed to take over for daily use, such Books as they may select for that purpose, giving the usual receipt to the Librarian,

Museum.

34.—On the 2nd February 1814, the Society determined upon forming a Museum for the reception of all articles that may tend to illustrate Oriental Manners and History, or to elucidate the particulars of Nature or Art in the East. The following Resolutions were at the same time passed upon the subject,

35.—That this intention be made known to the public, and that contributions, be solicited of the undermentioned nature:—

1. Inscriptions on stone and brass.
2. Ancient Monuments, Mahomedan or Hindoo.
3. Figures of the Hindoo Deities.
4. Ancient Coins.
5. Ancient Manuscripts.
6. Instruments of War peculiar to the East.
7. Instruments of Music.
8. The vessels employed in Religious Ceremonies.
9. Implements of Native Art and Manufacture, &c. &c.
10. Animals peculiar to India, dried or preserved.
11. Skeletons, or particular bones of animals peculiar to India.
12. Birds peculiar to India, stuffed or preserved.
13. Dried Plants, Fruits, &c.
14. Mineral or Vegetable preparations in Eastern Pharmacy.
15. Ores of Metals.
16. Native alloys of Metals.
17. Minerals of every description, &c. &c. &c.

36.—That the hall on the ground floor of the Society's house be fitted up for the reception of the articles that may be procured. The plan and expenses of so doing to be regulated by the Committee of Papers and Secretary, and the person under whose superintendence the Museum may be placed.

37.—That the expense which may be incurred in preparing materials furnished in a state unfit for preservation be defrayed by the Society within a certain and fixed extent.

38.—All articles presented to the Museum shall be delivered in the first instance, to the Superintendent of the Museum, to enable him to make the acknowledgment, directed in the standing rules of the Society.

39.—A Register of Donations to the Museum, shall be exhibited each Meeting of the Society.

40.—The Committee of Papers shall adopt such means as may appear proper for making the intentions of the Society, in this respect, generally known.

41.—That the names of persons contributing to the Museum or Library of the Society, be hereafter published at the end of each volume of the Asiatic Researches.

Bibliotheca Asiatica.

The following Resolutions were passed on the recommendation of the Committee of Papers, under date the 2nd July 1806, but materials have not yet been received for publishing a volume of the work therein proposed.

42.—That the Society publish from time to time as their funds will admit of it volumes distinct from the Asiatic Researches, translations of short works in the Sanscrit and other Asiatic Languages, or extracts and descriptive accounts of books of greater length in those languages, which may be offered to the Society, and appear deserving of publication.

43.—That as this publication may be expected gradually to extent to all Asiatic books of which copies may be deposited in the Library of the Society, and even to all works extant in the learned languages of Asia, the series of the volumes, be entitled *Bibliotheca Asiatica*, or a Descriptive Catalogue of Asiatic Books with extracts and translations.

Physical Class.

The following Resolutions were passed on the 2nd January 1828 :—

1.—That the Physical Committee of the Asiatic Society be considered as in existence and for the same purposes as formerly, exclusively of Medicine.

2.—That all Members of the Society, be Members of the Committee.

3.—That persons not belonging to the Society, may be elected as corresponding Members of the Committee, upon the recommendation of any three Members without being liable to any charge.

4.—That the Committee elect its own Officers.

5.—That the Committee frame its own rules, subject whenever likely to interfere with the Rules of the Society, to confirmation at a General Meeting.

6.—That the proceedings of the Society, and short notices of any interest, be published from time to time, as they accumulate, in such form as may be hereafter found convenient.

7.—That Papers of any extent or permanent interest, be published in the same type and form as the Researches, so as to admit of their being bound up with them.

8.—That the expense of these publications be borne by the Society.

9.—That the Physical department of the Museum be considered under the especial charge of the Committee, Mr. Tytler undertaking the care of the Osteological Specimens and Mr. Ross of the Minerals.

Translation Committee, 3rd September, 1828.

That a Committee of the Society be formed to communicate with the Committee of Translation of the Royal Asiatic Society, and carry their views into effect by procuring and transmitting such Manuscripts, Originals and Translations, as they may be able to obtain for the purpose.

That a Book be opened for Subscriptions of Ten Guineas per annum, each Subscriber; entitling him to a Copy of all the Works printed by the Translation Committee.

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*A Grammar of the Cashmeeree Language. By Major R. LEECH, C. B.
1st Assistant Governor General's Agent, N. W. F.*

The following few pages, drawn up with the assistance of an educated Mussulman of Loodiana, who has not re-visited his country for a quarter of century, are intended to facilitate the acquisition of a colloquial knowledge of the Cashmeeree language, and although they do not deserve the name of a Grammar so much as the publication by Dr. W. Carey in 1812, entitled a Grammar of the Punjabee Language, yet the student will not have to get by heart such laboriously manufactured tenses of verbs as that at page 85, of the above work.

Ex.—“ Let him be obliged to be caused to be made.” Much labor and time would be saved, and every ordinary purpose answered, if in order to assist the acquirement of a colloquial knowledge of similar minor dialects, that scarcely deserve the name of a language, a Vocabulary only of words, and a collection of sentences actually heard spoken, were made in the Roman character.

The Cashmeeree language (Kaushir Zeo,) is not generally a written one; the character called Sháradá, (after the Goddess of that name,) having been, and being chiefly used to write Sanscrit works. The language is without doubt of Sanscrit origin, but has been considerably corrupted by the number of Persian words grafted on it by the Mahomedan conquerors of the province. It differs slightly in almost every pergunna. For instance, a cry in the city is called *kreak*; at Islamabad *krik*; and in other parts *krek*. A hill in the city is called *labur*, and *lábur* in the districts. In the city the bill of a bird is called *toent*, and in the suburbs *tsoents*; also a snake is in the former called *sareep*, and in the latter *sriph*. The dialect spoken at Kishtewar is, as might be expected, a mixture of Cashmeeree and Punjabee.

From the number of vowels and diphthongs, the language it would appear cannot be written correctly, either in the Devanagaree or Arabic character.

A Cashmeeree in speaking Persian, munches it, as it were with, and hisses it through, his teeth.

The *ou* (of our), of the Persian *houz*, (a cistern,) and the Hindustanee *houdee*, (a shell,) is changed in the mouth of a Cashmeeree into *oa* (of oar) and they pronounce them *hoaz* and *hoadee*. They also change *Kábul* (the *a* of car) into *koabul*.

They moreover change the Persian and Hindustanee *ai*, (of aisle,) of *paisa*, (a copper coin,) which is pronounced as *ái* into *ai* or *aai*, and they drawl out *paainsa*. In fact, the language is typical of the depressed and sneaking nation.

Natives of Cashmeer, who have acquired a knowledge of the more free and elegant Persian, are almost ashamed of their own puerile native tongue, which quality is imparted to it chiefly I suspect from the frequent occurrence of the consonant *ts* (of 'prints,') known both to the Pushtoo and Mahrathee, and the various diphthong of *i*.

<i>Sanscrit.</i>	<i>Gurmukhee.</i>	<i>Sháradá.</i>	<i>Name.</i>	<i>With Conso- nant.</i>	<i>Name.</i>	<i>Value of a Letter.</i>
अ	अ	अ	शरोऽ	क	ádou a, ... a	last a of America.
आ	आ	आ	ऐतोऽ	क	aitou á, ... á	in part.
इ	इ	उ	ययोऽ	कि	yayou ye, ... i	in hit.
ई	ई	वें	इशरोऽ	की	isharou ee, ee	in feel.
उ	उ	उ	उपलो	ऊ	upal wo, .. u	in full.
ऊ	उ	ऊ	उपलबु	क	upalbá woo, oo	in fool.
ऋ		रि	रिनोऽ		rinou re, ...	} Peculiar to Sanscrit.
ॠ		रु	रखोऽ		rakhou roo,	
ऌ		रि	रियोऽ		liyou le, ..	
ॡ		रि	रिसोऽ		lisou lee, ...	
ए	ए	ऐ	कालोऽ	क	králou ee, ... ae	in aerie.
ऐ	ऐ	ऐ	त्रालोऽ	क	tralou ai, .. ai	in aisle.
ओ	उ	उ	उलबु	क	ulháwoo, ... oe	in o'er or roe.
औ	उ	उ	अशदीऽ	क	ashadeeá, ... ou	in our.
अं	अं	अं	मसफेरं	कं	maspheram,	the nasal dot.
अः	अः	अः	दोफोरः	कः	dophyorah,	aspirate dots.

<i>Sanscrit.</i>	<i>Gurmukhee.</i>	<i>Sháradá.</i>	<i>Name.</i>	<i>With Conso- nant.</i>	<i>Name.</i>	<i>Value of a Letter.</i>
क	ਕ	क	कौक		kouka,	.. k in king.
ख	ਖ	ख	खुनिख		khunikha,..	kh in ask him.
ग	ਗ	ग	गगर्ग		gagarga, ...	g in got.
घ	ਘ	घ	गगर्ग		gás ga ...	{ gh in hog hunt or dg in pledge.
ङ	ਙ	ङ	गरुगन		nárugna,	ng in king.
च	ਚ	च	चाडच		tsátu tsa,	{ ts in prints ch in church.
छ	ਛ	छ	छदिजछ		tssuting tss,	{ tsh in fits him chh in fetch him (tch.)
ज	ਜ	ज	जईज		zaee za, ...	z and j.
झ	ਝ	झ	जाशिजज		zháshing za, za, zh	and jh.
ञ	ਞ	ञ	खनअटजे		khunaputa nye, ny	as gn in digue.
ट	ਟ	ट	शर्मोट		armanta ...	t (not t.)
ठ	ਠ	ठ	सर्मोट		sarmánta, ..	th (not th.)
ड	ਡ	ड	डुड		duda, ...	d (not D.)
ढ	ਢ	ढ	टकढ		dhakadha,..	dh (not dh.)
ण	ਣ	ण	नानशरिन		nánagurina	ṅ (the English harsh.)
त	ਤ	त	तोवन		towata, ...	t
थ	ਥ	थ	थानिथ		thaji sha, ..	th

<i>Sanscrit.</i>	<i>Gurmukhee.</i>	<i>Sháradá.</i>	<i>Name.</i>	<i>With Conso- nant.</i>	<i>Name.</i>	<i>Value of a Letter.</i>
द	द	रु	ददौद		dadou dad,...	} the Continental.
ध	प	ए	द्वजिद		doojy da,.. dh	
न	ळ	न	तस्तून		nastoo na, . n	Ditto.
प	थ	थ	पउर्य		paoorpa ... p	
फ	ड	ठ	फुरिज		phurinya ... ph	in uphold.
व	घ	व	बुब		buba ... b	
भ	कु	रु	वाइब		baiba, ... bh	in abhor.
म	म	म	मौम		mouma, ... m	
य	ळ	य	यायये		yáwaye, ... y	
र	व	व	रकर		rakara, ... r	
ल	ळ	ल	लाचल		lávála, ... l	
ब	दृ	ब	वशिव		washinva, . w	
श	स	स	शकशे		shakarshe, . sh	
ष	ष	ष	काविशे		phárishe, ... sh	
स	स	स	सस		susa ..., ... s	
ह	उ	ह	हालद		hálaha, ... h	
क्ष	ख	कः	ऊनिवठनः		kruliwath, kkh, kh, h	the Sanscrit.

The language has besides the preceding,

The English	e	in let.
	o	in hot.
	ae	in aerie.
	au	in cause.
	oa	in oar.

It has not the Arabic *hh* and *gh*, nor the *q* or *k* in quoit, the hickup *d, h*, nor the hickup ϵ . and substitutes *ph* generally for *f*.

The nasal dot answers to the *qn*, *n* in the French non, or expresses the *n* in the following words, *king*, *finch*, *flint*, and the *m* in *plump*.

There are three *ll*, the English final and Italian *gl*.

Besides the usual *h*, there is the indication of one at the end of many words which I have expressed by raising it above the line. Ex. *lu^h* a fox, *su^h* a lion, *tsu^h* thou; *zu^h* 2, besides the *u* full there is the French *u* of *reçu*, which I have rendered by *û* as *dûnga*, a kind of boat, *tûnga*, a sob, *sûts*, tailor. There is also another long vowel which I have expressed by *aa*, it has the sound of *u* or *ea* before an *r*, as in *burn*, *earn*.

The Cashmeer *z* has often the sound of partaking of *dz*, the *ds* of "sounds."

It has not the Arabic *th* in think, and *th* in those.

There is also another vowel between *a* and *i*, which might be expressed as *á* in *kándár*, *bahery*, *máts*, earth, *ráts*, better, *yáts*, more, *pyáts*, a kind of grass.

Of the Diphthongs.

In these consists the chief difficulty of speaking the language.

1st. Diphthong of the short *a* and short *i* (*ai*), which might also be expressed *à* or *ai*.

Tait, a pony mare.	Zait, old, tattered.
Kair, a beam.	Rait, taken, (f.)
Zair, a deaf woman.	Wait, rolled up, (f.)
Bair, a crack in wood.	Baid, a woman of rank.
Mair, a hut.	Gair, a pitcher.
Nair, lower part of arm.	Tssairr, empty, much.
Air, well in health.	Bhair, a she ass.
Ais, we.	Tair, chair, a chattering woman.
Bait, a hob.	Wair, a dried peas pudding.
Jair, mounted as jewels.	Pait, a small plank.
Dair, a robust woman.	Khait, concealed, (f.)
Tsait, cut, (f.)	Phait, drowned, (f.)

In the Persian character *tait* is written تیت but if pronounced *tati*, means "really, actually a pony mare." It could not be written *taty*, but might be written *tati*, with the *i* above the line; how it and the other diphthongs or rather compound vowels should be printed, others must determine.

2d. Diphthong of the short *a* and short *u*, taut, a poney توت pronounced something like *toe ut*, but not *tatu*.

Baud, a great man.	Thaud, a tall man.
Bhaul, open, loose.	Tsaud, a round basin.
Waud, tied.	Gaud, a hole.
Daud, burnt, (m.)	Tsaut, torn, (m.)
Khaut, concealed.	Phaut, drowned, (m.)
Waut, arisen.	Raut, taken.
Laud, made.	Maut, mad.
Khaud, pudendum.	Laut, nearly dumb.
Kaul, dumb.	Daul, skirt.
Naul, a shell.	Tsaul, escaped.
Waul, drest.	Daul, slipped.
Baul, recovered in health.	Naur, sleeve.
Baur, a large crack in wood.	Tsaur, mare.
Gaur, made.	Jaur, mounted as jewels.

This compound vowel appears an *o* not so long as *oe* in *roe*, and not so short as *o* in *hot*. It might be written *ai*, the short *u* thus seems to indicate the masculine, as the short *i* does the feminine gender.

3. Diphthong of the short *u* and short *i*.

Guir, a mare, گور pronounced not as if written *gury*, but rather as *guri*.

Shuir, a virgin.	Duiny, walnuts.
Luits, light, (f.)	Tuiny, navel.
Muij, a reddish.	Muits, fallen off in flesh.
Suil, spare time.	Tuij, raised.
Buil, proper name of woman.	Duij, simple woman.
Kuib, hump-backed, (pl.)	Tuil, antimony, pencil.
Wuith, arisen, (pl.)	Duib, washermen.
Guit, emaciated, a plait in sewing.	Luit, light, (pl.)
Wuit, passages.	Wuiny, now.
Khuit, part of a boat.	Buit, face.

It might be conjectured that the above *u* could be written as a *w* as *gwir*.

Guri, means horses, and *guri*, mares.

4th. Diphthong of the short *i* and short *u*.

Liul, لؤل , a vessel for cooking rice.	Biun, set up in business in the world.
---	--

Piul, a testicle.	Ziun, to be born.
Diul, a soft grass used for packing and matting.	Miul, reconciliation.
Tsiul, squeezed.	Siut, grief, misfortune.
Jiur, granular parts of rice.	Jiut, wan.
Chhiut, white.	Kiut, on account of.
Tiut, bitter.	Kiul, a peg.
Asiup, emaciated.	Tsiut, leavings.
Piun, to fall.	Diun, to give.
Nium, to take away.	Chiun, to drink.
Khiun, to eat.	Tsuin, a pillar.
Lium, plastered.	Miun, measured.

This *i* is not exactly a *y*.

5th. Diphthong of the short *i* and short *a*.

Piak, thou fallest.	Liad, litter horse.
Diad, mother.	Vias, a woman's confidante.
Mias, a root in a lake.	Khias, eat of him.
Chias, drink of him.	Viat, name of river.
Tsiab, heart.	Khiat, eaten.
Tiat, interested friendship.	Riakh, a fowl's dung.
Diakh, angry.	Chhiab, thou art, (f.)
Tsiad, patience.	Bhiak, thou eatest or eat thou.
Tsial, squeezed, shampooing.	Dial, skin, peal.
Hial, lake weed.	Zial, cream.

6th. Diphthong, the short *u* and the English *o* in hot.

Duod, milk, دُود not dwod.

Buod, understanding.	Wuol, dregs of butter.
Khood, a pit.	Guon, a heap.
Tsuol, a large kettle, stone of ma- sonry.	Huod, a fool.
Muol, price.	Wuod, scalp.
Puot, piles.	Zuol, drowsiness.
Suobh, happiness, contentment, peace.	Wuot, rice.
Duokh, pain.	Tsuot, any.
Chhuok, wound.	Muokh, cheek.
Nuosh, daughter-in-law.	Duos, wall.
Kruok, a snoar.	Khuot, false.
Suon, golde, rival wife.	Tsuon, to these four.
Buon, below.	Kruon, misery.
	Bhuon, elbow.

7th. Diphthong of shortened *ai* of aisle, and the short *a* (as in by, and not bye,) care must be taken to drop the indication of an *e* at the end of the letter *i*, as pronounced eye.

The pronunciation of eye according to this system, would be *ai i*,

but this diphthong is *ai a*.

Aiat, eight	Zaian, a wooden bucket
Aiar, own	Aiab, defect
Vaias, a year	Vaiad, a caste
Daian, a fine	Paia, a market
Laias, a glutton	Aiash, enjoyment
Jaiar, pleasure, excursion	Saiat, a wick
Maial, desire	Waiar, enmity
Ghaial, name of a favorite resort	Saial, flood
in Cashmeer	Raian, a caste
Saiad, a sayud	Maiat, a corpse
Maian, a frog	

7th. Diphthong of a double or prolonged short *a* (*aa*.)

Chaauy, thine	Kaar, neck
Praauy, old, (f.)	Tsaar, I have selected, (f.)
Dyaauy, tea churns	Kraar, wife of potter
Jaauy, life	Pyar, dear, (f.)
Zaauy, acquaintance	Vyaar, a spiteful woman
Braar, a cat, (f.)	Waar, a kitchen garden plot
Chaar, an idiot, (f.)	Byaali, seeds
A'as, mouth	Myaauy, mine
Kraauy, relations	Paar, a little cottage
Naauy, grand-mother	Gaar, kernel of singará
Siaauy, clever.	Praar, dear in price
Tsaauy I have brought in	Laar, she ran after me, a cucumber
Dyaar, a rich woman	Jaar, I have lectured (her)
Aar, an owl	Jaar, keeper of her word
Maaush, a male buffalo, } would seem to be different forms of this diph-	
Maaiush, a female ditto, } thong	

A'aas, mouth, is properly a distinct diphthong.

Examples of the English, *au* in cause.

Kaushur, a Cashmeerian	Bauwuk, they have unbosomed
Tsaudur, name of a village	themselves
Wauwur, a weaver	Rauwuk, they have lost
Waudur, a champion	Sauwuk, they have put to sleep
Pauwur, a cottager	Chauwuk, they have made drink
Mauruk, they have killed	Mauzur, a cripple
Chauruk, they have tightened, or	Khauwur, left, (not right)
dunned	Bhauruk, they have extracted
Wauluk, they have brought down	Sauruck, they have ferried over
Pauwuk, they have thrown down	

Examples of the English *oa* in oar, written in the Persian character as an alif. In some words there is a slight indication of an *i* preceding.

Broar, a cat	Pishoal, soft
Choar, a simpleton	Dyoar, a rich man

Byoal, seed	Kroar, a scab
Dyoan, a forked cylinder or circular fork for stirring tea	Myoan, mine, (m)
Proan, old	Prioar, dear, last year's
Prioat, we have pierced	Bhious, we have eaten of him
Pioas, I have fallen	Chioas, we have drunk of him
Nioav, we have had taken away	Krioar, husbandman's festival
Prioav, we have obtained	Limoav, we have had plastered
Likhoav, we have had written	Pitoav, we have reconciled
	Shoal, a kind of grain

This *oa* seems to denote the masculine, (myoan, mine,) as *aa* does the feminine, (myaany, mine.)

Examples of the English short *a* in England.

Basak, ducks	Watah, roll up
Wanak, thou sayest	Pakak, thou goest
Bhatak, thou hidest	Rachak, thou keepest
Phachack, be drowned	Ranak, thou cookest
Ganak, congeal	Khanak, thou diggest
Manak, obey	Menak, measure
Ratak, take	Asak, laugh
Barak, regret	Dazak, be burnt
Zarak, pine after	Sarak, remember
Alak, shake.	Malak, rub
Walak, throw over you	Shalak, a beating
Galak, melt	Khalak, drive away, (flies)
Marak, die	Balak, recover
Tsatak, tear	Dalak, slip
Tsalak, run away	

There is another vowel, the *ea* of earn, not so long as the one I have expressed by *aa*.

Examples of the *a* (á) of the English ark.

Pánts, five	Dán, cooking place
Wánts, a curse	Tsánts, deception
Lánz, a stake	Lánts, an eunuch
Lánk, a step	Wánk, a ringlet
Dáng, a club	Tánk, a bit
Bánd, a dancing boy	Báng, call to prayers
Shánd, a pillow	Dánd, bullocks
Chánd, the centre of a shawl or handkerchief	Bránd, a verandah
Shánk, suspicion	Chhán, a carpenter
Wán, a shop	Prán, onion
Mánd, working of dough	Rán, thigh
Tánch, quizzing	Mánch, honey
	Kánch, glass

Examples of the short English *i* in bit.

Nish, near	Hin, an accomplishment
Rish, spite	Hish ! to drive away fowls
Dish, country people	Phish ! to a child
Phish, a few threads or straws	Mish, a splinter
Nis, take away to him	Dis, give him
This, noise of a crack	Pnis, whisperings
Yis, come to him	Kis, little finger of what kind
Yin, are coming	Yim, these come to me
Yik, come thou	Sis, a wart
Jin, melt	Din, they give
Nin, take away	Min, measure
Sil, disease of consumption	Pil, reach
Vil, a short space of time	Kil, a thrust
Gil, a kind of bird	Chil, a stake in the water, religious seclusion
Tsit, loss of use of limbs	Sir, a secret
Bit, power	Nit, taken away
Gith, a rush of water, bothering	Chit, mind
Sit, sound	Gin, count
Chir, stream of milk of animals sucked by a child	Zid, revenge, spite
Jin, Genii	

Example of the *ee* in the English see.

Teer, rams	Neer, near! (feminine relation, she came out)
Pheer, she rambled	
Cheer, I have squeezed, (f.)	Geer, I have surrounded, (f.)
Veer, a willow	Sheer, a broom
Zeer, a punch in the ribs	Seer, crazy, (f.)
Heer, head of a sheep	Yeer, we have
Sheer, I have arranged, (f.)	

Example of the short *u* in the English bull.

Gur, a horse	Tuk, have torn with teeth
Zur, grandson	Tsuk, sour
Chur, have rinsed	Kus, who
Shur, a male child	Hus, to set on, to quarrel
Hur, surplus	Tut, tight, under restraint
Wun, have woven	Rut, right, (not wrong)
Dun, have shaken	Jhut, a sip
Jun, deep emerged	Kut, wetted
Num, have beaten out	Mut, evaporated
Tul, have lifted	Phut, a basket
Kul, a tree	Buz, parched
Kub, hump-backed	Wuz, bubbled up
Shup, a sift	Huk, dried
Tsup, silent	Kun, sold
Dup, sunshine	Kud, a name explained

Buj, have thought on	Zuk, down
Rul, stray, unclaimed	Rus, have taken huff
Tsun, have put in	Mus, small turnip, fatigued
Kuts, got well	Yus, whoever
Kut, got wet	Jut, we have gained
Bum, a vine in the water	Sut, incapable
Hum, they	Hut, spoiled, turned bad
Yun, to come	Lut, light, (not heavy)
Wur, rice boiled dry, have strung	Yut, hire
Mur, to rub between hands	Mur, skirt
Wul, a hole	Shuz, unalloyed, untasted
Kur, force to take	Luk, strangers
Kun, have sold	Dukh, pain
Hun, has swollen	Hud, rice, alone
Run, one-handed	Duj, a foot
Lun, have reaped	Dul, a cullender
Nun, saltish	Gun, knead
Zul, have shaped, scraped	Kuz, a cup of sugar-candy
Dub, a Dhobee, a sound	Wut, rose up
Gub, heavy	Wush, a sigh
Thup, a fruit basket	Rum, a single hair
Kup, a dabba	Wut, drizzling
Rup, complexion, countenance	

Examples of the English *oo* in fool.

Tsoor, a thief, loosening roots of plants	Noor, name of woman
Moor, rubbing planted grain between the hands to remove the husk	Roo, have planted
Loor, have demolished,	Moor, a hole
Choor, have rinsed	Joor, have collected
Khoor, razor	Groost, cultivator
Goor, a milk maid	Goour, a milkman
Door, a breeches string	Gooir, a milkmaid
Soour, a hog, is finished, exhausted	} would seem to be different diphthongs.
Poo, a sound of derision by making a trumpet of the hand	
Hoor, I have discharged	Khyoost, for shame!
Joo, affix to names of Cashmeerees	Myoot, a kiss
Zoor, wooden candlestick	Tsyoot, have masked
Soo, have sewn	Vyoot, fat
Doo, have swept	Nyook, have carried him away
Koor, a virgin	Nyool, green, not ripe
Door, an alley	Gyool, we ridiculed
Poor, I have filled up	Nyoor, pasturage near, made on it
Shoor, I have arranged	Shoor, have arranged
Toor, a small metal saucer	Khyoor, an oar
	Pyoor, fat, (animal)
	Jyoor, a simpleton
	Ryoog, a flower
	Roog, ill
	Lyook, we have written

Toor, cold weather	Tsyoon, became on our guard, have
Zoo, life	guessed at
Yoo, come	Tyoor, a ram
Phiroost, lucky	Kroor, a well
Zyoot, tall	Diroor, skin
Tyoot, bitter	Gyoor, have encompassed
Pyoos, have pounded	Vyoog, a trap door
Byoot, seated	Chhool, a kid
Nyool, he met me	Dyoot, we have seen
	Nyook, they have taken (him) away

In the following there is an indication of an *i*.

Hooir, a house	Looir, a walking stick
Mooil, a root	Gooily, a bullet

There is another *oo* compressed between the teeth.

Toorf, cold weather	Toor, cold
Booily, song of bird	Dooily, a "dolie," deserted as an
Looily, affectionate	orphan
Gooily, kernels	Jooily, collected in cloth
Gooiri, here	Bhooily, have released
Hoon, a dog	Tooily, I have weighed them
Zoon, moon	Doon, cotton-cleaner
Shood, a drunkard, ruined by bad	Roon, husband
habits.	Rood, rain, remained
Mood, deed	Loos, fatigued
Good, pudendum	Choon, interference, part taking,
Booz, we have comprehended	flattery
Toon, navel	Noon, salt
Moon, wool of sheep, a wall	Woon, we have wove
Loot, plunder	Soot, puff of a pipe
Boot, an image	Loon, we have reaped
Koon, corner	Phoor, burnt rice at bottom of pot
Poor, a step	Sool, we have weighed

Examples of the English *ae* in *erie*.

Yael, tamed	Yaer, wool
Shaer, arrange	Saer, a seer
Waer, affection	Naer, come out
Gaer, surround	Phaer, traverse
Tsaer, delay, yellow apricot	Gael, ridicule
Baer, border of garden	Mael, join, visit
Fael, a crime, trick	Khaes, have ate of him
Daes, country	Daer, plenty, heap
Haer, ladder	Gaen, verses
Maen, measure	Tsaen, take care
Zaen, earn	Zaet, grow
Tsaet, pound	Maet, sweeten
Saet, a fit	

Examples of the English *ai* in aisle.

Ropai, rupee	Tsopai, silence
Ruwai, am planting	Warai, am stringing
Surai, a goglet	Murai, I am hushing
Sulai, am putting to sleep	Phulai, a blossom
Kolai, a wife	Wolai, come thou woman
Mulai, never	Tulai, am lifting
Wonai, am weaving	Wunai, never again
Sonai, rival wives	Iti, not him.
Bhonai, elbows	Bonai, not I from below
Zuwai, I am growing up	Suwai, am serving
Subai, in the morning, province	Kubai, boss of a shield
Khulai, am opening	Bumai, eyebrows
Bowai, was	

Examples of the English *oe* in roe.

Khoei, foot	Woer, chatter
Zoer, force	Soer, a hog
Moer, vain, presumptuous	Tsoer, 4, a caste
Poen, heel	Toel, a weight
Moekh, cheek	Loel, desire
Doekh, pain	Boel, determination
Poesh, a flower	Roesh, be offended then!
Boesh, fashion, demand in market	Woesh, a sigh
Loet, a roll on the ground	Tsoet, a bruise
Roet, a kind of bread	Moet, a grain
Loess, be tired	Goess, I went

There is a shorter *o*, as the *o* of holy, while this is the *o* of hole.

Examples of the English *ou* in our.

You, yesterday	Bou, has been
Zou, joke with	Lou, dew
Gou, went	Chou, have drunk
Pyou, he fell	Khyou, have eaten
Ryou, be conceited	Lyou, lick
Zyou, tongue	Myou, mew ! of a cat
Pyou, light (the fire)	Nou, new
Khou, a pit	Hou, yes

On Gender, the formation of.

Masculine.

- 1 Gur, a horse
- 2 { Kokur, a cock
- { Kautur, a cock pigeon
- 3 Kukiul, a ditto, (blue)

Feminine.

- Guir, a mare
- Kokair, a hen
- Kautair, a hen pigeon
- Kukil, ditto, (blue)

	<i>Masculine.</i>	<i>Feminine.</i>
4	{ Tssáwul, a he-goat Wátul, a sweeper Pahul, a shepherd	Tssáwíjj, a she-goat Wátíj, a female sweeper Pahíj, a shepherdess
5	Batuk, a drake	Batich, a duck
6	Laung, lame man	Lainj, lame woman
7	Phaur, a male ass	Phair, a female ass
8	Chhán, a carpenter	Chhaany, carpenter's wife
9	Tsroal, a jailer	Tsraaj, wife of jailer
10	Káv, a crow	Káviny, a hen-crow
11	Hoon, a dog	Hoony, a bitch
12	Pániur, a drawer of water in pitchers.	Pániureny, wife of water-carrier
13	{ Manur, a lapidary Khár, a blacksmith	Manar báee, wife of ditto Khárabáee, wife of ditto
14	Groost, a cultivator	Greest báee, wife of ditto
15	Jyayur pachhun, the fabulous seemurgh.	Jyagar pachhiny, the female
16	Mohnyn, a man	Zanána, a woman
17	Háput, a bear	Háputs, female
18	Su ^h , a lion	Seeminy, a lioness
19	Shál, a jackal	Shaaí, female
20	Patssalau, a lynx	Patssalaav, female
21	Lu ^h , a fox	Laash, female
22	Yár madun, a lover	Vyes, a mistress
23	Goant, a hill pony	Gánt, mare
24	Toata, a parrot	Tooti, female
25	Maa,unsh, a buffalo	Maainsh, female
26	Gán, a bully	Gaany, a bawd
27	Koan, a blind man	Kaany, woman
28	Ná,íd, a barber	Ná iz, wife
29	Wouwur, a weaver	Wouwureny, wife
30	Airz, a gander	Airziny, a goose
31	Yachh, an ogre	Yachhiny, an ogress
32	Hánz, a boatman	Hánzainy, wife
33	Woany, a trader, mussulman	Wáinyainy, wife
34	Koaka, nurse's husband	Dái, a nurse
35	Parzun, a male servant	Wula gásheny, female
36	Ghulám, a slave	Tsunz, a female slave
37	Woarud, a 2d husband	Woarudz, 2d wife
38	An hóhur, a batchelor	An harish, a maiden
39	Pushut, a straw slipper-maker	Pushainy, wife
40	Bachhera, a colt	Bachheer, a filly
41	Dodagoo,ur, milk man	Dodagooir, wife
42	Batu, a Hindoo	Batainy, wife
43	Rántun, demon	Rántats, } female Rántas, }
44	Haund, a ram	Gaib, a ewe

A man speaking says, buchhus, I am—and a woman, bachlias, ditto.
 Me^h che,i chá,i. I have drank tea, (f:)
 Me^h khyou tsoont, I have eat an apple, (m:)

NUMBER.

<i>Singular.</i>	<i>Plural.</i>
Mohnyn, a man	Mahnivi, men
Tssáwul, he-goat	Tsáwilli, goats
Gur, horse	Gurri, horses
Wagoo, a mat	Wagivi, mats
Tsoed, a small pitcher	Tsaddi, pitchers
Gaund, a log of wood	Gandi, logs
Zaur, deaf man	Zarri, men
Goor, milk man	Goorri, milkmen
Lopun, a grain vessel	Lopuin, vessels
Naut, a pitcher	Natti, pitchers
Latsul, a broom	Latsil, brooms
Liul, a vessel, earthen	Lilli, vessels
Budh, old man	Buidhi, old men
Tsaut, a dwarf	Tsuiti, dwarfs
Thaud, lanky	Thadi, lanky men
Pohul, shepherd	Pahalli, shepherds
Groost, a cultivator	Greestt, cultivators
Buhur, a druggist	Buhirri, druggists
Tsroal, a police man	Tsraalli, policemen
Hoon, dog	Hoonni, dogs
Broar, cat	Braerri, cats
Lu ^h , a fox	La ^h , foxes
Pottul, an image	Potilli, images
Punz, monkey	Pa,inzi, monkeys
Kándur, a baker	Kandarr, bakers
Aar, an owl	Árre, owls
Khon, elbow	Khonā, elbows
Batuk, duck	Batak, ducks
Hángul, a jamber	Hángul, "jambers"
Wátul, a sweeper	Wátal, sweepers
Kokur, a cock	Kokar, cocks
Kántur, cock-sparrow	Kántar, sparrows
Saruph, a snake	Saraph, snakes
Wandur, a monkey	Wándar, monkeys

DECLENSION.

<i>Singular.</i>	<i>Plural.</i>
Gur, horse	Guri, horses
Gursund, a horse's	Gurin hund, horses'
Guris, to horse	Guren, to horses

Guris and gurnen being each the inflected case of its number, any past position can be added, as

Guris nisha, from the horse Guris pyat, on the horse
Guris nish, near the horse

Nechu, son	Nechivi, sons
Nechivi sund, of son	Nechiven hund, sons'
Nechavis, to son	Nechiven, to sons
Hata nechavi, oh ! son	Haugo nechavyou, oh ! sons

Inflected Case.

Nechavi.

Nechiven.

Dái, a nurse	Dáya, nurses
Dái hiund, of nurse	Dáyan hund, of nurses
Dái, to nurse	Dáyan, to nurses
Hatai dá,ee, oh ! nurse	Hatai dáyou, oh ! nurses

Kolai, a wife	Kolaiye ^h , wives
Kolai hiund, of wife	Kolaiyan hund, of wives
Kolaiyi, to wife	Kolaiyan, to wives

Khou, a pit	Khouva, a pits
Khou hund, of pit	Khounan hund, of pits
Khavi, to pit	Khovun, to pits

The affix to the Genitive Case has also Gender, thus :—

Nechiv sund nechu, son's son	Shur, a child
Nechiv sánz koor, son's daughter	Shur hen, a poor little child

Answering to the Persian affix *k*, *dkuhtar*, *dukhtarak*

There is an affix *han* or *hen*, which has a diminishing meaning.

Tsuit, bread	Tsochahen, a bit of bread
Rati pauny, good or sweet water	Riti pány
Rati pauny	Riten pánin hund
Rati pányuk	Rit you pányuk
Ratis pányis	Rityan pányan
Rati pányi nisha	Rityou pányou nisha

Comparison.

Rut, dood	Rati khuota rut, better, (best)
Yats rut, very good, (rats, f)	Literally good, beyond good

Pronouns.

I, boh	Tse,pyat, on thee
Mine, myoan myaiany	Tuhindi khatar, for your sakes
Me, meh	Tohi pyat, on you
Myáni khatra, for my sake,	Aass, we
Sáni khátra, for our sakes,	Saiany, ours, soan
Myanen, my, (adjective)	Asi, us
Sányan, our, (ditto)	Me ^h pyat, on me
Myani nechivi, oh ! my son	Asi pyat, on us
Thou, tsu ^h	Tuhhi, ye
Thine, choan, (chaiany)	Tuhuindi, your
Thee, tse ^b	Tohi, you
Cháni khátar, for thy sake	Tsenish, from thee

He, su ^h	Tim, they
His, tamsund	Tuhund, theirs
Him, tamis tas	Timun, them
Tas nisha, from him	Lagu, be at ; lágus, beat him
Tamis pyat, on him	Tits, like him

This, yi ^h	Yim, these
Of this, yemsund	Yuhund, of these
To this, yemis	Yiman, to these
Yemsindi, k/atra	Yihindi, k/átra
Yemis pyat, on this	Yits, like this

That, hu ^h	Hum, those
Of that, humsund	Humanhund, of those.
To that, humis,	Human, to those
Humsind,i	Khátara, for his sake

Myoangur, my horse	Soangur, our horse
Myaiany gurri, my horses	Saiany gurri, our horses
Who	Kus
Whose	Kemsund, kohund
Whom,	Kas kamis

Kamsindi, } Kahindi, } Kasindi, } Kamis pyat	khátar	For whose sake On whom
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Which Of what To what Kath kyut Kami bapat Kamis pyat		Kyá Kamyuk Kath On what account For what reason On what
--	--	--

Self, pána Of self, panun To self, pánas Panani khátar Pánas pyat, Parat akhá		Paany pánai, of own accord Pánanyen, own, (<i>adjective</i>) For own, sake Pána waany, among themselves Every one
--	--	---

Yas tas yaunis tanus Yamsund tamsund Yus, (<i>m.</i>) yas, (<i>f.</i>) Yus akhá Kas akis Kamis akisund Kas akis nisha		To whomsoever Of whomsoever Who ever Whosoever, whatever one To which one Of which one From which one
---	--	---

VERBS.

Auxiliary Verb *ásun*, to be.

Present Tense.

Bo ^h chus, Tsu ^h chuk Su ^h chu	Aass chi ^h Tohi chuwa ^h Tim che
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Perfect Past Tense.

Bo ^h ásus Tsu ^h ásuk Su ^h aus	Assi aais Tohi aasiwu Tim aais
--	--------------------------------------

Imperfect Past Tense.

Asus ásán Asuk ásán Aus ásán	Aais ásán Asyu asan Aais ásán
------------------------------------	-------------------------------------

Future Tense.

Bo ^h yats ásun	Assi yat son ásán
Tsu ^h yatsah ásun	Tuhi yat su ásun
Su ^h yatsi ásun	Tim yat sau asun

Imperative Mood.

Sta ás	Tuhi ásiw
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SUBJUNCTIVE MOOD.

Present Tense.

Bo ^h ása	Assi assou
Tsu ^h áсах	Tuhi ásur
Su ^h ási	Tim ásan

Perfect Tense.

Bo ^h ásaha	Assi ásahou
Tsu ^h áсахak	Tuhi ásayoo
Su ^h ásahe	Tim ásahan

Pluperfect Past Tense.

Asus ásmut	Aais aasmit
Asuk ásmut	Aasyu aasmit
Aus ásmut	Aais aasmit

CONJUGATION OF THE VERB

*Sapadun, to become.**Present Tense.*

Bo ^h sapada, (za,)	Aass sapadon
Tsú ^h sapadali	Tuhi sapazeev
Su ^h sapadi	Tim sapadan.

Imperfect Past Tense.

Bo ^h ásus sapađán	Assi aais sapađan
Tsú ^h ásuđ sapađán	Tuhi aasyn sapađan
Su ^h aus sapađán	Tim aais sapađán

Perfect Past Tense.

Bo ^h sapađus	Aas sapađid
Tsú ^h sapađuđ	Ttuhi sapađiv
Su ^h sapađ	Tim sapađid

Pluperfect Past Tense.

Bu ásus sapađmut	Assi aais sapađmit
Tsú ^h ásuđ sapađmut	Ttuhi aasyn sapađmit
Su ^h aus sapađmut	Tim aais sapađmit

IMPERATIVE MOOD.

Sapadarun, becomes

Stu sapad

Ttuhi sapadiv

SUBJUNCTIVE MOOD.

Judwai, if.*Present Tense.*

Same as Indicative Mood.

*Perfect Past Tense.*Bo^h sapadahá
Tsu^h sapadahak
Su^h sapadahaAais sapadahon
Ttuhi sapadahiv
Tim sapadahan

CONJUGATION OF THE VERB

Dapun, to speak.

INDICATIVE MOOD.

*Present Tense.*Bo^h chus dapán
Tsu^h chuk dapán
Su^h choo dapánAass chi^h dapán
Ttuhi choo^h dapán
Tim chi^h dapán*Imperfect Past Tense.*Bo^h asus dapán
Tsu^h asuk dapán
Su^h aus depánAassi aais dapán
Ttuhi aasoo dapán
Tim aais dapán*Pluperfect Past Tense.*Me^h ous dupmut
Tse^h ousu dupmut
Tem ous dupmutAssi ous dupmut
Tohe ousoo dupmut
Timou ous dupmut*Perfect Past Tense.*Me^h dup
Tse^h duput
Tem dupAssi dup
Tohe dupoo
Timon dup*Future Tense.*Bo^h yats dapun
Tsu^h yatsak dapun
Su^h yatcha dapunAais yatson dapun
Ttuhi yatchoo dapun
Tim yatsan dapun

IMPERATIVE MOOD.

Tsu^h dapak

Ttuhi dapyn

SUBJUNCTIVE MOOD,

*Yud wai, if.**Present Tense.*

Bo ^h dapah	Aais dapon
Tsu ^h dapak	Ttuhí dapy ^m
Su ^h dapi	'Tim dapan

Perfect Tense.

Bo ^h dapaha	Aais dapahon
Tsu ^h dapaha	Ttuhí dapy ⁿ ^h
Su ^h dapihe	Tim dapahan

Dapawun, *speaker.*

CONJUGATION OF THE VERB.

Yun, to come, (feminine.)

INDICATIVE MOOD.

Present Tense.

Bo ^h yumuga	Aais yinoce
Tsu ^h yikai	Ttuhí yeewai
Sa ^h yee	Tima yin

Imperfect Past Tense.

Ba yimahai	Aais ási yuván
Tsa aasuik giwán	Ttuhí ásawai yuván
Sa ^h ass yuván	Tima ása yuván

Perfect Past Tense.

Bo ^h áyis	Aais ái
Tsa áyik	Ttuhí áyawa
Sa á,i	Tima á,i

Pluperfect Past Tense.

Boh ásus ámuts	Aais ása ámatsa
Tsa áasuk ámuts	Ttuhí ásawa ámatsa
Sa ás ámuts	Tima ása ámatsa.

Future Tense.

Boh yatsai yun	Aais yatso,i yun
Tsi yatsak yun	Ttuhí yatswai yun
Sa yatsi yun	Tima yatsan yun

IMPERATIVE MOOD.

Tsa yih	'Tsuhi yeewe
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SUBJUNCTIVE MOOD.

*Present Tense.**Feminine.*

Yimai
Yik
Yihe

Masculine.

Yihan
Yihyoo
Yihan

Perfect Tense.

Yimahá
Yihak
Yihe
Aais nai yimoeé,
Aais yimon nah,

Yimahon
Yihyoo
Yihan
We do not come, (women.)
Ditto ditto, (men.)

Cardinal Numbers.

- | | |
|--------------|------------------|
| 1. Akh | 34. Tsoitruh |
| 2. Zuh | 35. Pántsatruh |
| 3. Trae | 36. Sheitruh |
| 4. Tsoar | 37. Satatruh |
| 5. Pánts | 38. Aratruh |
| 6. Sheh | 39. Kunatajih |
| 7. Sat | 40. Tsatájih |
| 8. Aait | 41. Akatajih |
| 9. Noun | 42. Duitaojih |
| 10. Dah | 43. Te-i-taajih |
| 11. Keeh | 44. Tso-i-taajih |
| 12. Buah | 45. Pántstaajih |
| 13. Turwa | 46. She-i-tájih |
| 14. Tsoada | 47. Sata-tájih |
| 15. Pánda | 48. Aratájih |
| 16. Shura | 49. Kunawanzah |
| 17. Sada | 50. Pántсах |
| 18. Arada | 51. Akawanzah |
| 19. Kunawuh | 52. Duwanzah |
| 20. Wuh | 53. Trawanzah |
| 21. Akawuh | 54. Tsowanzah |
| 22. Zitawuh | 55. Pántswanzah |
| 23. Truwuh | 56. Shawanzah |
| 24. Tsowuh | 57. Satawanza |
| 25. Paaíntsu | 58. Arawanzah |
| 26. Shuwuh | 59. Kunahaat |
| 27. Satáwuh | 60. Sháeat |
| 28. Aatáwuh | 61. Akahaat |
| 29. Kunatruh | 62. Duhaat |
| 30. Truh | 63. Trehaat |
| 31. Akatruh | 64. Tsuhaat |
| 32. Doitruh | 65. Pántsaahaat |
| 33. Teitruh | 66. Shihaat |

67. Satahaat	85. Pántsasheet
68. Arahaat	86. Sheisheet
69. Kunasatat	87. Satasheet
70. Satat	88. Arasheet
71. Akasatat	89. Kunanamat
72. Dusatat	90. Namat
73. Tresatat	91. Akanamat
74. Tsosatat	92. Dunamat
75. Pántsasatat	93. Trenamat
76. Shehsatat	94. Tsonamat
77. Satasatat	95. Pántsanamamat
78. Arasatat	96. Shehnamat
79. Kunasheet	97. Satanamat
80. Sheet	98. Aranamat
81. Akasheet	99. Namánamat
82. Do, isheet	100. Hat,
83. Treisheet	1,000. Sás
84. 'Tso, isheet	1,00,000. Lach, khár, akhanvar
	1,00,00,000. Krór, trah, 1-16 bhár
Jora, 2 or more	Páwul, $\frac{1}{4}$ ditto
Twára, 3 or more	Aad ropai, $\frac{1}{4}$ ditto
Tsombará, 4 or more	Anna, an anna, 1-16 ditto
Paanshi, 5 or more	Toonk, a tanga, paainsa, a pais
Noanmara 9 or so	Bahágany, $\frac{1}{8}$ pais, poontsu, $\frac{1}{4}$ ditto
1st. Godaniuk	Adhiul, $\frac{1}{2}$ pais
2d. Dugum	Hár a cowrie
3d. Treium	Pánzuh, $\frac{1}{2}$ trah
4th. Tsorium	Manut, $\frac{1}{4}$ ditto
5th. Paintsium	Admium, $\frac{1}{3}$ ditto
6th. Sheyum	Dodpáv, 1-16 ditto
7th. Satium	Trechatang, 1-32 ditto
8th. Aatium	Dod Chatang, 1-64 ditto
9th. Nowwium	Chatang, chuttack
10th. Dohium	Shat-o-pánts kah, 6 and 5 are 11
Mohar, a goldmohur	Zuh trucha sheh, $2 \times 3 = 6$
Ropai, a rupee	

Days of the Week.

Saturday, Batawár	Wednesday, Bodwár
Sunday, Atwar	Thursday, Wraswár
Monday, Tsandrwar,	Friday, Jumá
Tuesday, Bomwár,	

Months of the Year.

Wahek,	Kártik,
Zeth,	Munjhar,
Hár,	Pohi,
Shrawan,	Mag,
Baudur,	Phágun,
Aashid,	Tsitr

(To be continued.)

View of the principal Political Events that occurred in the Carnatic, from the dissolution of the Ancient Hindoo Government in 1564 till the Mogul Government was established in 1687, on the Conquest of the Capitals of Beejupoor and Golconda; compiled from various Authentic Memoirs and Original MSS., collected chiefly within the last ten years, and referred to in the Notes at the bottom of each page. By COLONEL MACKENZIE.

[Submitted at a Meeting held on the 5th April, 1815.]

1. To give an idea of the state of the whole Carnatic at this period, which forms a remarkable era in the history of this part of India, it may be useful to take a rapid view of the events preceding this period for the last hundred and twenty years, since the overthrow of the last Hindoo government of the Carnatic, commonly called the Raia-Samastanum of Beejanuggur.

2. While that government subsisted in its vigor, specially towards the decline of the last dynasty of Beejanuggur, it appears to have been conducted under certain polity, adapted to the general spirit of Hindoo jurisprudence, and this system was regularly established in the provinces subjected to their authority from the furthest limits (of Goa and of Calinga) on either coast to Cape Comorin South, in progression as they were gradually reduced.

3. The names, titles, and duties of a variety of officers are still preserved which formed the court, and supported the state of the ancient monarchy while the provincial government was conducted by Dan-Naiks,* Naiks, Naad† Prabhoo, Poligars,‡ and a regular gradation of subordinate officers, who were allowed lands in Hoombliga,§ Amara, or as Polliams, held of the sovereign or raja, by a species of tenure much resembling the European fiefs, subject to a certain assessment of revenue, under regular admeasurement, or estimate of productions, or annexed to their respective

* The Dan-Naiks and Naiks, (Viceroys and Lieutenants,) were also part of the Tellinga system.—See Memoir of Waruncull Tell.

† Naad-Prabhoo, *i. e.* Lord or Governor of a Naad or Province.—See Bangalore Memoir, Mar.

‡ For the origin of Polligars, see Memoirs of Nidicull, Ballapoor, Maggry, &c. Mar. and Can.

§ For Hoombliga and Amara tenures, see Memoirs of Holla-Honore and Soobiah's compilation, Can.

appointments, in lieu of salary or wages according to the nature of the service. It would appear that these appointments were generally here-

Officers granted in hereditary succession. ditary in the eldest son; though a confirmation was expected, and a recognizance solicited on each succession, accompanied by douceurs, gifts, and offerings, the origin perhaps of fees of a like nature in European tenures; but defects from want of talents, from crimes, and from disloyalty, were sufficient to disqualify and lay aside the eldest son; though a regard to propinquity was so far observed, that the nephew not unfrequently succeeded the uncle, and stepped in during the minority of the real heir, who in his turn, assumed his station in the natural course, by domestic arrangement, by fraud, or by violence; this is particularly remarked in the Bednore* and Mysore history. Evident traces of such variations appear in the mutilated

Condition of the general mass of the people. accounts still preserved, and of the appointments of the great officers and functionaries; and though our

knowledge of the real state of the great mass of the population be more obscure, there is reason to presume, that the condition of the lower orders in the country South of the Kistna, had never varied much under this government of Beejanuggur in their relations to the paramount sovereignty, from that which under the general system had from time immemorial prevailed throughout India; this holds at least to the period previous to the dissolution of the *Southern†. monarchy*, which being first shaken by the celebrated battle with the confederate Moslem princes near the banks of the Kistna, continued to linger under a gradual decline till the last branch, whose titles‡ were barely acknowledged, was expelled from

A. D. 1646. their last fortress in the Carnatic, about twenty-eight years afterwards.

* See Historical Memoirs of Bednore, Mysore, Chittledroog, and Serah, which throw considerable light on this subject.

† This is meant here to apply to the Beejanuggur government; the system that prevailed among the Dravida nation seems in some respect to have been different, and more attention was paid to the privileges and rights of the subject.—See their grants; but the Beejanugur government appears to have respected these privileges after they had acquired the supreme authority over the country.

‡ See Grant No. 1 of the Mysore Rajahs, where the several titles of the Rayel are still observed, though that chief had entirely thrown off all the authority of the paramount sovereign. A. D. 1613.

4. The dissolution of the Hindoo monarchy in the rapid course of human events was throughout the Carnatic followed by long series of disorder, of anarchy, and of confusion, whence their laws, institutions, and privileges were involved in an obscurity,* that renders it difficult to clear up difficulties arising from the intermixture of new arrangements with ancient customs; but it is hoped, that the following notes taken in the course of examining several documents that have fallen in our way, if they do not satisfactorily explain some of these obscurities, may at least excite to a clearer development.

5. After that battle, in which Ram Raaz, and almost the whole of the ancient nobility fell, the country around the capital was laid waste, and the remains of the great families being dispersed, the city

A. D. 1567. speedily fell to decay, as an European traveller describes it two years afterwards,† and recent inspection confirms the accuracy of that‡ description.

6. It appears, that the allies after the battle‡ marched as far as Anagoondy, and their advanced troops penetrated to Beejanuggur itself, which they plundered, committing all manner of excess; but Venkatadri, the brother and representative of the late sovereign, giving the places which had been formerly wrested from the allies, (the Duab, Mudcull, Rachoor, Adoni, Aulingpoor and Bagratal from Adil Shah; and Kowillconda, Bankul (Pangull,) and Kunpoor (Gunpoor,) from Cootub Shah,) the victors without availing themselves further of the advantage they had obtained, were satisfied, took leave of each other at Rachoor, and returned to their several dominions without leaving any garrison, occupied South of the Toombuddra,§ excepting Adoni

* It is remarkable that this obscurity prevailed no where in a greater degree than in the immediate vicinity of our presidency of Fort St. George, where until recently, a very imperfect knowledge prevailed of the various successions or changes of government in the lower country.

† Cæsar Fredrick's Voyage A. D.—See Asiatic Miscellany, Vol. I, p.—The remains of Beejanuggur were minutely examined in December 1800.—See Journals.

‡ For the Hindoo account of this memorable battle, see the Ram-Raja Cheritra, which enters into details descriptive of Hindoo manners, but differing much from the Mahomedan authors in regard to circumstances in the war and battle.—See collection of Memoirs for the History of the Beejanuggur Government of the Carnatic.

§ For the details, see Scott, Vol. II, p. 298 and 299, also the Tarik Adil Shahee, a Persian MS. Cælconda, Pancull and Gunpoor are hill fortresses, capitals of Circars north of the Kistna and South of Hydrabad. Mudcull, Rachoor and Bagrectal are in the Duab. Adoni is South of the Toombuddra.

and some jagheers said to have been assigned to the Bargee* chiefs about Anagoondy, and that lay near to that river.

7. We may, however, suspect, that this apparent moderation was A. D. 1567. owing rather to political motives, and to the jealousies and divisions which existed among these four confederate powers, and from no lenity to the unfortunate Hindoos; as we are told that Nizam Shah of Ahmednuggur dying immediately after this event, and being succeeded by a minor, Ali Adil Shah of Beejapoor, seizing the opportunity as favorable for his designs, moved with an army to Anagoondy, to place Tim Rajal, the son (or rather brother) of Ram Raaz on the throne of Pennaconda, and depose Venkatadri, to acquire for himself Anagoondy and Beejanuggur; but his design was defeated by Ahmednuggur chiefs being called upon for aid by Venkatadri, and Adil Shah was forced to retire from Anagoondy without effecting his purpose.†

8. But the design was not relinquished altogether, for taking advantage of a favorable conjuncture of affairs, within six years afterwards at a conference, a coalition was formed between Ali Adil Shah and Moortiza Nizam Shah, when it was agreed, that while the latter reduced Berar, the former should conquer as much of the dependencies of Beejanuggur as he could, without any interruption from Nizam Shah. We are told that from the strong fort of Adoni being a little before this time taken from one of the nobility of the late government, Ali Adil Shah's arms had acquired such reputation, that he was encouraged to resolve on other conquests, and accordingly Turkull, Daruar, Bankapoor, and other places of strength were reduced, and these successes were pursued and followed up to the reduction of the sea coast from near Goa, (which was attempted about A. D. 1577. 1567,) to Baralore, including the present districts of Soon-da, Ankola, Kanore and North Canara, and the petty chieftains of that coast were forced to a reluctant submission, and governors left, who immediately began to build forts‡ to bridle their new subjects.

* It is said that at this time they left some of the Bargeers at Anagoondy, where a jagheer was granted to them.—See Scott, Vol. I.

† See Scott's Deckan, Vol. I, p. 298, 300, 301, &c.

‡ Ankola, Mirjan, Chundergooty, &c. One of the most distinguished of these new governors from Beejapoor was of Hindoo Braminical descent, brought up a Mahomedan, and his memory is still remembered in these countries with respect.—Journals.

9. These successes as usual led to further encroachments, and an army was sent against Pilconda, whence "Nagatadri is stated to have retired A. D. 1567. to Chunderghury;" but this is presumed to be erroneously stated, as Timma Rajah was settled there ten years before. These events, however, are confirmed by Hindoo authorities, and the Moslem writers attribute to the corruption of the Bargee chiefs the relief of that place, what the Hindoos ascribe rather to the intervention of their Gods and to the valor of Jagadeo-Rayel, who is supposed to have by his heroism saved the place; in consequence of which, an extensive grant of lands was added to his government,* of forty-eight provinces; the whole extending from the Baramahl West, across the upper country to Adjampoor and Holla Honoor in the modern Bednore, including the whole of that extensive tract; excepting Seringapatam and its dependencies, which were still under the feeble rule of a viceroy related to the ancient Rayel government. This government of Jagadeo's remained in that family with some changes till it was ultimately absorbed in the growing fortunes of the Mysore Wuddiers,† A. D. 1579. which at this time comes to be noticed by its rising opposition to the wretched remains of the ancient authority, though it yet only occupied the little district about the present capital of Mysore, then scarcely known by that name.

10. The excesses of the Beejapoor Maratta jagheerdars‡ at this time, A. D. 15. who had been stationed about Beejanuggur, or rather A. S. 1500. at Anagoondy, to secure the new conquests, attracted the notice of that government; nor could they be suppressed till prompt measures and even treachery was used, which drove some of the more able of the Hindoo chiefs into the service of the Carnatic princes, and this contributed to give a breathing to the last remnants of the Hindoo monarchy.

11. The suspension of the Mahomedan§ conquest was further pro-

* See Denkanicotta and Chinapatam Memoirs, and several Memoirs and Districts. It appears to have stretched across the peninsula from Barramahli (which it embraced) to Azimpoor, now part of Bednore. A list of them is inserted in the District Memoirs.

† See Account of the origin of the Mysore and Bednore family.

‡ The Berjee chiefs or Bargeers; soldiers mounted on horses, the property of the Circar.—See Scott, Vol. I, p. 305.

§ The Beejapoor officers never extended their conquests along the Western coasts further than Honore, Cundapoor, and I believe Malabar or Malliallum was never subjugated by the Mahomedans till Hyder's time.

tracted by the situation of affairs in Beejapoor, where a minority, intestine broils at home, and war abroad, particularly with Ahmednuggur, constantly obstructed their plans of conquest; in the intervals, however, they seem to have turned their arms against the country of Malabar, or rather Soonda, Bednore and Koorg, whence Bahlill Cawn,* A. D. 1595. in two expeditions with various fortune collected a forced A. S. 1517. tribute; in all this time only once mention is made of the Carnatic; the Duab indeed appears to have been still occupied, and mention is made of Adoni being relieved from the attack of one of the zemindars, (as the Polligars are always denominated by the Mahomedan writers,) or more probably from one of the chiefs of the late government.

12. Such was the state of the Northern and Western provinces of the late Carnatic government; nor were matters scarcely better in the Eastern and Southern provinces, though farther removed from the Mahomedan states. About the year 1597, Venkataputty, the representative of the ancient Rayels, and the last of them who exhibited any appearance of power, ruled with some degree of magnificence at Chundragury and Vellore; where he still held a doubtful sway over the remaining provinces of the South and East, which appear to have been ruled by Viceroys, Lieutenants or Naigs; the most distinguished of which seem to have been

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| 1. Histnapa Naik, at Ginge. | 4. Jaga-deo-Rayel, at Chinna-
patam. |
| 2. ————Naik, at Tanjore. | 5. Trimul Raj, at Seringa-
patam. |
| 3. ————Naik, at Madura. | 6. ———— at Pennaconda. |
13. Towards the end of his government,† he appears to have made

* I allude here to Scott's authorities. Much information of the transactions of the Carnatic it is hoped may be obtained on translation of several Memoirs which may illustrate or confirm each other. Near Adoni in particular, a Mahomedan jagheerदार seems to have been early fixed on the lands formerly occupied by some of the Rayel's relations.

† In the *Tarik-Cootub-Shah*, Vol. II, p. 647, it is mentioned, that "taking advantage of the attention of the Golconda government being taken up by the invasion of Ahmednuggur by the Mogul forces under Sultan Moraad, the son of Akber, he approached the limits of Guntoor, with a view of recovering that province; but speedily retreated on finding the Golconda officers were disposed to receive him in force, and apologized, alleging his movement was from motives of religion "to visit and perform ablution at the great tank of Cummam," A. D. 1593 or 1595.

one effort to recover Guntoor from the Golconda sovereign, but was obliged to retire with an apology that sufficiently marks his imbecile character. Of the small degree of attention paid to his authority, we have the evidence of the European Missionaries of that period, who expressly state, that “the Naig of Madura was then at open war with him;” his protection was however courted by the Missionaries, and he appears to have lent a favorable ear to them; and induced by the solicitation of the merchants of his country, he seemed inclined to grant a settlement to our East India Company’s factors, had not the Dutch, who had already established themselves at Pullicat, opposed it. In their correspondence they observe, that his death without male issue was expected to be followed (as in fact it was) by great troubles in the ensuing year.”†

14. While these causes operated to retard the progress of the Mahomedan arms in this interval of 32 years, a few aspiring individuals laid the foundation of an intermediate order of things, which in the central districts occupied the place of the late government, and gave origin to a series of smaller states which gradually grew up and increased in power and territory, in proportion as by force or superior address, they could extort or wrest from the lesser usurpers their newly acquired possessions. In this incessant struggle, every artifice of a policy adapted to the circumstances of the times, and to the peculiar habits of these people,‡ was called forth into action, and exerted with a perseverance not unworthy of the struggles of a nobler cause.

15. In the more northern parts of the ancient Carnatic government, which had been abandoned in a manner of the ancient rulers as more exposed to the incursions of the Mahomedans, these usurpations more particularly are to be noticed, as being connected with the events

* See Purchas, Vol.—p.—.

† See Floris’ Voyages in Ustley’s Collection, Vol. IV, p.—.

‡ According to the native Memoirs, every chief of superior talents or good fortune is always praised for his address and knowledge in the Chatoor-Oopayem, or four modes or measures resorted to in the Hindoo diplomatique science; viz.

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| 1 Sama.—Address, Negotiation, Policy. | 3. Bhedha Rycratagem; or “Ruse de Guerre.” |
| 2. Daana.—Presents, Gifts, Conciliatory Measures. | 4. Dundah.—Downright force, or the “ultima lex regum.” |

that subsequently led to their consolidation once more under one general government.

16. The Polligars of Chittledroog,* Raidroog, Harponnelly, Tara-keira, Ruttinghery, &c. at this time acquired some strength and consideration, and seemed to promise jointly to oppose a formidable barrier to further Mahomedan encroachments, had not this hope been destroyed by their restlessness, and their perpetual contests for power and territory. To this period of confusion we may assign the origin of most of the Droog† of the Carnatic. Most of these new chiefs were of the lower and hardier classes, the Baya or Beder, Gollar and Villallur, or the hunting, pastoral and agricultural tribes; these in their earlier accession to power exhibited traits of fortitude, hardihood, and a severity of manners, originating in the simplicity of their original modes of life that would have dignified their resistance to the northern invaders of their country, had they not been marked by excesses that quickly descended into savage, ferocious contests, feuds, and animosities among themselves, till their crimes at last paved the way for

* Historical Memoirs and Annals of various other Hindoo families originating in this period are collected, but not yet translated, which being wrote in their own language, and not intended for European eyes, convey their sentiments in forcible terms.—Raidroog, Mysore, &c. Memoirs.

† As Chitteldroog, Ruttingeery, Hosdroog, Paughur, Gardangeery, and a vast number of others in gradation form impregnable mountains provided with natural springs of water, to rocks of very inferior height, and proportioned to the condition or talents of the occupier, Kyfeyats of almost every one are preserved, wherein the circumstances that gave rise to their occupation at first, whether from “warning in a dream of the tutelar Deity of the place,” or the “discovery of some sacred symbol,” or to the conveniences of water and shelter to some bold leader with his savage band, are related with minute details, and the dates of their foundation are preserved with scrupulous care in the families originally appointed to keep these records; some of which have come into our hands, as Cancoopa, Chitteldroog, &c. To no country indeed can the description of the Poet be more appositely applied, for here it may be truly said that, “Not a mountain rears its head unsung” in some Mahatuum, or Pooranum or ancient legend; for scarce a hill or rock whereon a cistern could be found but has been fortified with walls, sanctified by temples, and converted into the fastness of some hardy chief. The same causes give rise to the same order of things in all nations; and we here find the same age of castles and of petty fortresses which in Europe followed the dissolution of the Roman empire, in the period of anarchy that preceded the gradual forming of the modern (I had almost said, late) states of Europe, actually following in the South of India the dissolution of the Hindoo monarchy, and preceding the gradual renovation of one general government.

the final reduction of their country. The Bednore family also in this interval of universal confusion consolidated their territories along the Western Ghauts, and further extended their possessions from their first small establishment at Caladee, in the end of Ram Raaz's time, down to the coast of Honore, and afterwards to the limits of Malabar south; they resisted and opposed successfully the further advance of the Beejapoor forces along the sea coast, who in the meantime established themselves in the districts of Panch-mahl, lying between Goa and Honore, where their officers established their authority, and constructed forts (as is already related) to support their acquisitions, and further their designs on that side, and probably to keep Goa in check at the same time. The provincial administration of the Beejapoor government does not ever appear to have been carried further south than the limits of Honore; as the country from thence to the borders of Malabar was held by the native Rannees of Garsoppa, and other petty chiefs, till they fell under the power of the Bednore family.

17. For nearly 50 years, a clear connected series of historical events is yet wanting for the state of that side of the Carnatic dominion, and the only light is derived from an attentive comparison of isolated facts, detailed in series of Memoirs now collected.

A. D. 1645.
Detailed materials
wanting here for near-
ly 50 years.

18. The acquisition of the fort and island of Seringapatam by the Wuddier of Mysore is one of the most remarkable of the events, as the cessation of the ancient Rayel government above the Ghauts may be dated thenceforward, as well as the first permanent establishment of a new state that afterwards acquired considerable influence in the affairs of the Carnatic.

A. D. 1609.
Seringapatam in
this time acquired
by the Skiddier fa-
mily of Mysore.

19. A more detailed account of this family and state,* will explain this further, but of other causes that in the mean time impeded the Mahomedan progress in the south, and of their divisions among themselves, one instance occurs too remarkable to be passed

The progress of the
Mahomedan conquest
retarded by their own
intestine divisions.

* This subject being taken up by a hand fully adequate to the subject, it might be unnecessary here to notice the Mysore transactions, were they not occasionally necessarily involved in a general view of the state of the Carnatic. Some anecdotes and facts connected with their history have also come to light since Colonel Wilks had collected his materials.

over; this was the temporary government established by the Abyssinian Mallik-Amber, who not only successfully resisted the progress of the Mogul arms, but laid the governments of Beejapoor and Golconda under contribution, and chose the foundation of a new state at Ghurkee, which afterwards became better known by the name of Aurungabad.

A. D. 1626. The death of his successor in 1626, put an end to

this rising state in its infancy, which from the wisdom, moderation, and policy of this warrior and statesman, promised fair to introduce a more firm and temperate system of administration into the south, which appears to have been at this time in a state of the utmost distraction from the weakness of the several governments, the ill-judged ambition of their rulers,

And by the encroachment of the Moguls.

and the encroachments of the Mogul armies, who now invaded the Deccan on three quarters.

20. The strong fort of Dowlatabad falling into their hands in 1634,

a regular Mogul government was established in the

A. D. 1634.
Fort of Dowlatabad reduced.

Deccan, of which Burhanpoor at first was the capital; but as their conquests became gradually extended,

the seat of government was afterwards removed to the more central

A. D. 1636. situation of Aurungabad, by the prince Aurung-

zebe, who seems first to have put every engine in motion to reduce the Patan governments of Beejapore and Golconda, as the leading steps to the universal domination of the peninsula.

21. But so short-sighted was the policy of these princes, that though

Mahomedan states of Deccan weakened by divisions.

the consequence of the Mogul conquests must

have been obvious, their time and their resources

were consumed in futile discussions, or ill ob-

serv'd treaties, and their resources expended on vain projects or exhibitions of useless pageantry,* and in supporting an extravagant pomp

* The profusion of inestimable diamonds and other precious gems which adorned the state of the Golconda king, is detailed minutely by European writers, and it is from this exhibition that the celebrity of the mines of Golconda became so current in Europe in the 16th and 17th century, as to be used as a common-place topic and metaphor with our Poets in oriental similes.—See Havart for the vast riches of the Golconda monarch displayed in his dress on a visit to the European factories on the coast. See Valentyn also; both these works contain much information of the state of the country at that period, in connexion with their object of an account of the state of the Dutch establishments and commerce.

that ought to have been rather devoted to a general league for opposing the common enemy. Without possession of more authentic materials, it is only to some of these causes that can be attributed the joint partition and conquests of the Zemindars* of the Carnatic, (as they affect to call them,) which was planned and commenced precisely about this period by the joint forces of the rival states of Beejapoor and Golconda.

22. On the occasion, it is said, that a mutual agreement† was entered into by the Golconda and Beejapoor governments, to avail themselves of the weakened state of the Carnatic to reduce the several petty chieftains, and to divide the country amongst them, each keeping possession of what they first got possession of, independent of other motives. It is handed down in Hindoo MSS. and traditions, that they were invited by several of the chiefs, by the weakness of the government, and by the eternal jars and feuds of the petty usurpers, Rajahs, Naiks and Poligars, who in this interval had seized the districts, and formed the country into several subordinate petty states, and reduced the remaining branches of the ancient royal family to an abject dependence on their capricious or venal support.

23. The Beejapoor chiefs having already established a regular government in the centre of the Carnatic, would find less difficulty in extending their possessions in that quarter, while the Golconda state naturally turned its views towards the South-Eastern quarter, and the sea coast, till at last they came in mutual collision. Our plan does not admit of a regular development of their progressive reduction of the several provinces, nor could it be well attempted here, from a deficiency

* A term rather applicable to the original system of the conquerors in their own country, than to the former, or the new state of these chiefs. For it is well known that those of Bednore and Mysore in particular, never acknowledged their power, and still resisted their authority.

† In consequence of this treaty, Gandicotta, Chunderghery, Chingleput and the country south to the Palar was overrun by the Golconda chief, Meer Jumla; and Gingee, Vellore, &c. reduced by Mustapha Cawn from Beejapoor, from 1646 to 1652, and were formed into provinces under officers dependent on Golconda and Beejapoor. This continued till the Mogul conquest in 1687, when they were annexed to the provinces of Carnatic, Balla Ghaut, or of Payen Ghaut.

of materials; a brief statement of the most striking facts sanctioned by evidence can be therefore only attempted.

24. The first invasion of the Beejapoor forces took place in 1636;

A. D. 1636. at least we have written evidence that Ranadoolah
Invasion of the Car- Cawn this year appeared with an army before
natic, Balla Ghaut by Beejapore. Cawleydroog in Bednore, (where Veeralruddra Naik
had taken shelter,) having destroyed Ickairee, their original seat, and
overrun the whole country from Bankapoor, Hurryhur, Busuapatam,

A. D. 1638. Tarakeira, &c. In the next year we find him coming
Progress of Rana- before Seringapatam,* whence he was repulsed, but
doolah Cawn. he overrun the whole open country as far as the Cavery, and establish-
ed the first regular Mahomedan government at Bangalore,† whence the
Poligar was expelled to Maagry; and at Serah‡ which he made the
capital of the province of *Beejapoor, Carnatic Balla Ghaat*, then formed
for the first time.

25. From information obtained at Serah, the establishment of the
Beejapoor government there is assigned to the year

A. D. 1644. 1644, which if correct, shews that this interval of
A. S. 1566. eight years was taken up in various expeditions and
Establishment of reducing the several petty chiefs that had establish-
of the new government of Serah. ed themselves in provinces, districts, and even villages.§

26. Ranadoolah Cawn|| commanded the first army, and is stated to
have remained in this country only two years. In this time, all the
provincial forms of administration peculiar to the Beejapoor govern-

In the Carnatic. ment were introduced. Serah was fortified, and
made the capital of the *province of Carnatic*, with seven purgunnahs
dependent, regulated by a complete revenue system, while the Poli-
gars that submitted, were allowed to hold the less fertile tracts on
paying a *condanee*, or tribute. *Zemindars*, garrisons,¶ and governors

* Mysore, Callala, and Bednore Memoirs.

† Bangalore and Colar Memoirs. Also the Memoirs of the family of Maagree, now extinct.

‡ Serah Memoir, and Historical Account of the Nabobs of Serah.

§ Mudgerry Memoir, &c. &c.

|| Rana-Doolah, from Rana, (Sans.), field of battle, and Doolah, a bridegroom.

¶ Bangalore Memoir and Serah, where a list of the garrisons is given, and of the Poligars.

were placed in the forts, independent in some measure of the civil governors; and lands in jagheer were granted to the chief military officers, and to the killadars, who were obliged by the nature of their tenures, to maintain a certain number of troops ready for the service of the state. Thirteen fortresses are enumerated in the address which Ranadoolah sent on this occasion to the sovereign, requiring killadars and troops to be sent to garrison them; and we find that cazies* were at the same time sent from the presence to administer justice according to the maxims of the Mahomedan jurisprudence.

27. Ranadoolah Cawn on his departure, committed the important charge of Soobadar of the province to Shahjee, a Marhatta officer, who appears to have been high in his estimation and confidence; a remarkable instance of this is stated in the Memoirs of Sheevajee, of the noble and extraordinary effort of the Mahomedan chief that saved the devoted Shahjee from the cruel punishment awarded by the intrigues of that weak court.

28. It might be esteemed remarkable, that the first Mahomedan government established in this important province should be committed to a Hindoo chief, did not the distinguishing traits of the system of administration that was adopted by the Turkish founders of Beejapoor explain, what is otherwise not very reconcilable to the general spirit of fanaticism that marked the first Mahomedan invaders, conscious of the difficulty of a body of isolated adventurers maintaining themselves in the midst of a foreign land, amidst millions possessing opinions and habits of life so very opposite to their own, and at constant variance with their brother states on the North and East. They seem to have early adopted a system evincing more libera-

* Colar Memoir, &c. Some of the sunnuds granted to these cazies still remain. Three copies are in the collection of grants.

† It might be deemed remarkable, that only three years previous to this date, the first grant of territory was issued to the English factory at Madras by the acknowledged sovereign of the Carnatic, the representative of the ancient legitimate Hindoo government, Sree Runga-Rayel, then residing at Chundragerry. The English government then is actually three years prior to any established Mahomedan government of the South.—See Translation of a Memoir, Appendix No. I.

lity and political sagacity, than had hitherto marked the traces of these invaders.

29. In the Turkish origin of this family ; and the succession of adventurers they encouraged from Turkey, Arabia, and Persia, may be traced perhaps some of these distinguishing traits. The Timaryet system* seems to have been followed in their extensive jagheers to their munsudars and chiefs, some of whom held very extensive tracts, (as Savanoor, Ankola, &c.); while the introduction of a body of foreign militia, the Hubshees, seem to have been borrowed from the Mamelukes and Janizaries, who in both cases were formed from slaves, or prisoners of war, purchased when young, and reared up in all the strictness of military subordination. We find accordingly, that the Hubshees furnished some of the ablest statesmen and warriors of the state ; purchased when young, through the medium of the Arabian traders, they knew no other country than that which reared them ; no other lord than him who cherished their youth. Educated about the court in the religion and in the accomplishments of the sovereign, they became attached to the prince from personal gratitude, from respect, and from the power of early habits ; and in various instances, manifested a zeal and spirit of loyalty, highly honorable in their patrons and to themselves, and useful to their adopted country.

30. Not in this instance alone was the policy of the Bejapoor state conspicuous, a superior knowledge of political finance seems also to have distinguished its general administration. Their institutions for regulating the country breathed a spirit moderate and mild, and well adapted to cherish agriculture, nor was commerce neglected ; and they very sagaciously availed themselves of the acute and subtle genius of that class† of their native subjects, which is so well accommodated to the arrangements of finance and of political economy. The

* This suggestion is mentioned not without considerable hesitation ; and without clearer information on the subject, it might be presumptuous to offer it, any further than as a conjecture founded on concurring resemblance.

† In Ferishta's Deckan, Vol. I, p. — is a remarkable instance of the inconvenience to which these native financiers were exposed, through the suspicions of the less enlightened and ambitious nobles of Bejapoor.

secular Brahmins were therefore employed with advantage in these situations, which the first rude warriors could ill manage.* In Ankola, in Sanoor, in Serah, the vestiges of this system still prevail, and wherever their armies moved, they appear to have been accompanied by these able accountants, (the Dessayets.) In Bangalore and Colar, we therefore find this system still (or recently) prevailing under all its several ramifications, while the provincial system of the Raya Samastan prevails in all the districts that had not been organized as settled provinces, but left under the payment of a tribute in their interior arrangements to the rule of the native chiefs.†

31. The choice of Shahjee under such a government, may be there-
Reflections on the character of Shahjee. fore attributed to a superior degree of political sagacity; and we accordingly find, that the establishment of the new system of management is attributed to him, who was destined to be still more distinguished afterwards as the founder of a dynasty and power, that in about 120 years was to extend its influence nearly over all India, and gave the first serious check to the progressive growth of the Mahomedan power, till the discomfiture of the Marhattas at Paniput in 1761.

32. In the Bangalore, Serah and Colar districts, this arrangement of revenue management lately prevailed, as described in an authentic Memoir, preserved by one of the descendants of the first accountants, where, after describing the arrangement of purgunnahs by Shahjee, he proceeds:—‡

* Hence the countries subject to the new families of Bednore, Mysore, Chittle-droog, Raidroog, &c., whose chiefs are registered as zemindars, were found to be managed according to the ancient system, while Bangalore, Colar and Serah, as organized provinces, were registered by this new system, managed by the Dessayet Brahmins.

† The Raidroog MS. saved by accident, clearly shews this as well as the Bednore, &c. Memoirs. This book states the original revenues of their country, and the mode by which the demands of the contending powers were assessed as an extraordinary (*a*) contribution on the ryuts, in proportion to the original rent.

‡ Literal translation from a Memoir, furnished by one of the descendants of these Dessayet Brahmin officers in the Colar district.—(Mar.)

(*a*) These extraordinary contributions appear also to have been practised in the more ancient provinces of the Southern Dravida countries, under the name of *dund*. This last chiefs of Inscriptions contain information of the taxes and customs levied on the subjects by the ancient government.

33. "Having formed these seven purgunnahs, he arranged the subordinate divisions of samoots, taruffs, mowza and mazara of each purgunnah, and appointed Jemmadars. In the time of the Rayels, the accountants had what we called Sumpratees, but the Marhattas introduced the different offices of

Notice of the system of management introduced by him into the Carnatic.

- | | |
|------------------|------------------|
| 1. Deshpondee, | 4. Deshmook, |
| 2. Coolkurnee, | 5. Canoongo, &c. |
| 3. Sirnaad-Goud, | |

and the accounts of the countries were kept by them. He also appointed serishtadars to all the purgunnahs. When jagheers were granted to the killadars and munsudars by the Circar, the revenue account of the district for the last years was previously examined, and the new revenue rated annually on the jagheer to be granted."

34. "In fixing the revenue thus established, the enams, or free gift lands, land customs, &c. were discontinued or deducted, and the net revenue more or less than the former, ascertained by the means of Zemindars."*

35. The Deish Coolkurneeke was to write the cowl-puttah, (contract or lease† for the revenue,) and the Deishponda was to sign it in Marhatta characters at the bottom of the paper. The Deishmook, Deishponda, Canoongo, and Sirnaad-Goud were also to add their signatures to the written deed, and the Emuldar finally to seal it.

36. These regulations were introduced by the Marhattas, whose forms are still used; but it should be carefully recollected, that this regular system of revenue be not confounded with the irregular contributions

* What were these Zemindars? Were they officers of government, or did any offices of the same description exist among the Hindoo governments previously? I should suppose the Naad-Gouds and Gram-Gouds were officers appointed by government, but hereditary, and equivalent to the officers now introduced by Shahjee. The Naat-Prabhoos of the ancient government was lord of the district, the very term used in the institutes of Manoo, "Lords of villages of 10,000 and 1000" are actually used in grants of the fifteenth century, remaining on several stokes at Calasa, where Bhyrasa Vadeyar is denominated "Lord of 1000 villages."

† Here we find the first notice of a lease, and there is reason to think no lease was issued under the Southern Hindoo management.—(P'otta.)

levied by the Marhatta armies in the Carnatic within a few years afterwards, when under the memorable denomination of choute,* (which was only introduced at the end of Aurungzebe's reign,) they laid the whole Deckan under contribution.

37. Several grants and sunnuds† of Shahjee and his successors down to 1686, still preserved in the districts of Bangalore and Colar, place beyond a possibility of doubt the existence of this government, which till very recently, appeared to have been unknown to Europeans. The forms of management by Zemindars, Deishpondas, &c. existed till lately, and the descendants of the original Dessayets are still spread over the country, and employed in various branches of our own administration.

38. The financial administration of the Beejapoor Mahomedan government was thus early committed to the direction of that class of Hindoo Brahmins, denominated in this country Dessayet, Nizam Shahee, or Marhatta‡ Brahmins, and to whose hands the custody of all public records and accounts have been, with little variation, since continued; particularly in Balla Ghaut, by the different Mahomedan successions, till they were transferred with the exercise of sovereign authority to the English government. In the lower country, where the Golconda government preceded the Mogul, the management was chiefly committed to another class of Brahmins provincially distinguished;§ but as the mode of administration peculiar to the Southern provinces demands a previous knowledge of the history|| of the earlier period, and more ample accounts of these districts, that subject may be passed over now to resume the progress of the Mahomedan conquests.

* See notice of the origin of the choute in the Bednore or Calladee Family History.

† List of twenty-six sunnuds preserved in the Bangalore Colar &c. districts, to the grant of Eckojee in A. D. 1670, copies (and even facsimiles of some of them,) are taken to authenticate the existence and nature of the government then established in the Upper Carnatic.

‡ Serah, Pennaconda, and Bangalore Memoirs.

§ Neyogee or *employed*, or secular, in contradistinction to the *Vidwamsas*, or theologian Brahmins.

|| A considerable collection of ancient Grants from all parts of the Tamul countries is in progress, and translations of several of them seem to throw a very clear and decided light on this subject

39. The Beejapoor generals having reduced or expelled most of the petty-Polligars, as Tavar Kaira, Bangalore, Ruttingury, &c. they seem now to have been prevented from wholly reducing the remaining Hindoo chiefs, by their own intestine wars at home, their contentions with the states of Golconda and of Ahmednugur, and from the necessity of watching the progressive movements of the Moguls from the North.

40. Shahjee was recalled* within a very few years to Beejapoor, in consequence, as it is said, of the disturbances raised by his son Sevajee in the district of Poonah, who having seized upon several of the forts of the Concan, it was imagined that the influence of the father might have been successfully exerted to bring the son to a due sense of his duty to the state. Doubtful probably of the result, or desirous (as the first wish of a Hindoo) to provide for his family, it is stated that Leaves his family in the government of the Eastern districts. previous to his departure for the capital, he made an arrangement of the Southern provinces, and divided them among the children he had by another consort; his favorite residence had been confined to Bangalore and Colar, the former (Bangalore) he bestowed on Eckojee, the founder of the Tanjore family, and Colar, Hoscott, &c. on four of his other children and his chief minister. The evidence of the grants† of this chief and his successors remaining in these districts, sufficiently prove the existence of this continuation of their government, in which it is remarkable that no notice is taken of the superior government and of the sovereign, agreeable to Hindoo form.

41. This subordinate government under these Marhatta families existed for 48 years in these districts; and until Cassim Cawn was sent by Aurunzebe to prosecute his successes to the Southward, who deprived the progeny of Shahjee

* Memoirs of Sevajee of Tanjore, &c. &c. which united, fully illustrate that part of the history of the times.

† Copies of some of these grants were sent to Poona in 1807, but no information could be obtained there on the subject, and the meaning of the previous formula was not known.—See Bangalore Grants in collection of Sassanums; they begin with three of Shahjee's, 1642 to 1650, and end with one of Eckojee's, 1670, and one of his Dewan's in 1681.

of their possessions, and annexed them to the immediate jurisdiction of the khalsa (or exchequer,) as a dependency on the newly-formed soobah of Beejapoor, under the name of Beejapoor Carnatic.

42. While the government of Beejapoor was gradually reducing the upper provinces of the ancient Carnatic, the state of Golconda had extended its acquisitions in equal progress in the NE. and SE. quarters.

43. Of the progress of the Golconda government in acquiring their share of the spoils of the Carnatic, we have yet obtained by few connected accounts. In pursuance of agreement with Beejapoor, they would appear to have about the same time also sent an army into the Eastern Carnatic adjacent to the territory of Guntoor,*

Guntoor, Cuddapa, and reduced the whole tracts lying along the coast, Chundraageery, Chingleput, Poonamalli, and thence extended their conquests above the Ghauts, including Cummum, Cudappa and Gooty; these were then still nominally dependent on the Rayel at Chundraageery;† but in fact at this time in the hands of various petty chiefs who had usurped all the authority of government under different titles. The chief places and forts appear to have fallen successively, but the materials yet obtained, afford no regular detail of the operations. The famous Meer Jumla, who afterwards revolted to Aurungzebe, and was so instrumental to his success in ascending the throne, was the principal general employed by the king of Golconda on the service; and it is said on this occasion, he‡ enriched himself enormously by wealth acquired in the conquest.

44. Gingee, the strong fortress of that name, was reduced by Mustapha Cawn,§ and that family descended from one of the ancient established nobility of Beejanuggur,

* Guntoor or Condaver, was reduced to the government of Sultan Abdulla-Cootub Shah, A. D. 1646.—Condaver Annals, p. 28. It is to be observed that it was conquered by Golconda in 1580, but after 36 years' possession, it was recovered and lost twice by the Hindoos, till its final reduction this year.

† Chundraageery fell A. D. 1646.—Sree Permadoor Memoir.

‡ Particularly from the Diamond-mines, where one remarkable gem is recorded as an object of imperial avarice and avidity.

§ Mustapha Cawn was probably one of the Beejapoor generals, when Sevajee made his memorable irruption into the Carnatic. He appears to have considered Gingee as a

was extirpated. Tripassoor, Chingleput and Chundrageery, the capitals of the nominal Rayel, were at last taken, but under what circumstances we do not learn, whether by negotiation or by siege; but it is reported that the Golconda forces were invited by the Naig of Tripassoor, and that the last, Sree Runga Rayel, fled to the Bednore chief for aid. This is confirmed by the records of that family, which mentions, that Sewapa Naik actually put an army in motion thirteen years afterwards, to restore the ancient Rayel Samstan,* and as a preparatory measure, advanced to Seringapatam, with a view of taking that stronghold. Whether he was serious in wishing to restore a government that might afterwards resume the newly-acquired power of his own family, or only designed to weaken the rival power of Mysore under the authority of a nominal sovereign, (a practice not unknown among the Hindoos,) does not clearly appear; nor what became of the existed prince after this unsuccessful attempt.

45. Thus the whole Eastern districts appear by degrees to have come under the Golconda government as far as the river Palar, which was the limit where these conquests came in contact with the Beejapoor conquests, soon after seized upon the Marhatta chief Eckojee. This province† came afterwards to be distinguished in the registers by the name of *Hydrabadee Payen Ghaut*, while their upper conquests were denominated *Hydrabadee Balla Ghaut*.

46. The military command was as usual placed in Mussulman havildars,‡ &c., while the financial administration was committed to the class of Brahmins distinguished still by the name of *Golconda Neyogee*, (or employed.) The system of dependency of Beejapoor, and therefore claimed it from his brother Eckojee, as part of his father's acquisitions. The account of the contentions between the brothers on this occasion is curious, and illustrative of the character of the parties and manners of the times. Vellore, a part of these acquisitions, was surrendered to the Marhattas A. D. — and to Sevajee A. D. 1677.—Madras Records.

* Sree Permadoor Account, obtained from one of the Religious Stallums, and in its dates appearing to be sufficiently authentic.

† The province of Gingeel extended to the sea-coast, and from the Palar to the Coleroon South; Tanjore lay beyond the Coleroon. For the reduction of these countries by the Marhattas, see Memoirs of Sevajee and of Tanjore, Appendix No. 2, 3, 4, 5, &c.

‡ Havildar. This is the designation of their office in Havart's Floris and other Travellers of these times, and the Madras Records.

Podellce Lingapa,* then said to be established by a Brahmin of that name, is still known in our own system of management. Thus the Carnatic on either side came in its revenues to be administered by two different classes of foreign Brahmins, *Marhatta* and *Tellinga*, acting under the authority of a double Mahomedan government, whose forms and documents then introduced are still erroneously recurred to, as standards of the ancient system of financial administration† in the Carnatic.

47. The Beejapoor generals on the either side, from their capitals of Serah, &c., appear to have reduced the country North of Ghooty, with the Polligars dependent on it; and then extended their dominions A. D 1652. into the vale of Canoul and the Circar of Nundial; and finally concluded the treaty of Penaconda in some haste, probably to prevent its falling into the hands of their Golconda allies and rivals; for, notwithstanding their apparent amity, which necessity only caused, the utmost jealousy and rivalry at times appeared, heightened by the animosities produced by opposite religious opinions of different sects.‡

48. The ablest of the Golconda generals rebelling in the mean time, the prince Aurungzebe readily availed himself of this favorable circumstance, and gave extraordinary encouragement to Meer Jumla; not so much influenced by his acknowledged talents perhaps as by the deep designs of that artful statesman on the imperial throne, and the future subjugation of the whole peninsula.

49. Such was the state of the times when a Native author§ con-

* This Brahmin in 1677 is stated in the Records to have been "then Governor for Golconda of all the country extending from Armigam, South to the Beejapoor possessions," comprehending in fact the ancient province of *Tanda-mundulum*, or what in latter times became the jagheer of the Company.

† It will be recollected, that this generally refers to the provinces South of the Toombuddra, or the Carnatic, the proper subject of this paper; while in Hindostan, the institutions of the Patan and Mogul emperors had been so long established as 7 or 8 centuries; and in Bengal for 200 years.—See Grant's Enquiry.

‡ The sects of Soonee and Sheya divide the Mahomedans of India. The Golconda chiefs were generally of the latter, holding Ali in great reverence.

§ This little tract containing the most authentic account of the Southern kings from the 13th century, was apparently written about the year 1646, the very year in which the Mahomedans expelled the last of the Rayels from Chundergeery, and was probably meant to excite the hopes of a deliverer of the Hindoos, and to revive their drooping spirits.—Gutpurtee MS.

cluding a chronological, but succinct list of their ancient kings, conveyed under the disguise of a prophecy, denouncing the evils that were to ensue, after declaring that the country shall then fall unto great disorder, and prodigies and omens shall appear. The goddess Callee shall appear in the world in all her wrathful form. The proprietors, occupiers, nobles, inhabitants and all the children of the South shall perish, mankind shall be in strife and war, the demons every where exciting to strife and arms in every town and in every street. The Munnovars (the great nobles,) shall be obliged to obey the command of Mussulmans, and be like sheep led to the slaughter, concludes with a prophetic annunciation* of a deliverer and conqueror to come, who should relieve the natives from their distress and oppression. Then the divine Veera Vasunta shall appear, young women and virgins shall announce his approach with songs of joy, and the skies shall shower down flowers, &c. These prophecies undoubtedly had the effect that was designed, of stimulating resistance to the weaker administrations of the Deckan, and exciting hopes of a conqueror and deliverer of their own nation; but relief was not yet destined to come through the means of a Hindoo. To elucidate the causes and progress of the approaching change of government; to explain the pretensions of the several competitors, and the actual state of the two expiring Mahomedan governments that were now about to be absorbed in the prevailing fortune of the Moguls, it may be satisfactory to trace back the chain of events that preceded the furthest extension of that empire.

* This resemblance to other well known prophecies of other nations and times is striking; in fact they have been made use of in all nations to stir up the populace, and nowhere oftener or with greater effect than in India, where the doctrine of the Metempsychosis particularly favors these opinions that are industriously propagated by the class of Jungums. We have had very recent instances of the use to which they are converted. Copies of several of these pretended prophecies circulated by these people, some so late as 1805, are translated.

II.

50. The first Mahomedan conquerors of the Deckan, it will be recollected, were Patans, led on by the redoubted Allah, who after a series of cruelties and rapacities that make the Mussulman name still an object of horror,* finally reduced the provinces South of the Godavery into the form of a province, denominated from its relative position to Delhi, the Deckan, or Dutchen (or South,) though erroneously, as the word is properly applicable, and understood by the ancient Hindoo geographers† to comprehend the whole of the South of India, or Dutchen, in contra-distinction to Hindostan, the country North of the Nerbudda.

51. It is not the intention here to detail the events by which their Carnatic first conquered. power was finally‡ established in the central parts, while they were forced to leave very soon the Southern provinces of Dravida and of Carnatic, &c. to the natives under a new dynasty of princes, who (from Memoirs now more clearly developed,) appear to have been actually about that period only established.§ The bold and ill-concerted measures of the succeeding Emperor, Mahomed III, and the attempt to remove the seat of imperial government to the centre at

* The kine-slaying Turkaloo, are emphatically mentioned in one of the ancient Kalla Canara Inscriptions at Basaral, dated A. D. 1135, or A. S. 1057.

† As given in their several Boogolums, or geographical descriptions of the Hindoo world. The Dutchen of the Hindoos comprehends the peninsula stretching South of the Nerbudda and Maha-nuddi, and is the *Dachen-abads* of the Periplus, which signifies the *countries lying to the South*.

‡ Waruncull was taken in A. D. 1324, (Daw,) the MS. account of its dynasty agrees in the most material facts.

§ Beejanuggur, the capital of the new kingdom, was then only established, though Ferishta asserts they had existed 700 years before, confounding it with the ancient capital and kingdom of Callian, of which Beejal Roy had been King. Door-Samooder, (the capital of the Carnatic at this time,) was taken in A. D. 1326, Daw, vol. — p. — which is confirmed by inscriptions. Campila also which appears to have been then a capital of some consequence, situated not far from Beejanuggur, was taken at the same time. The history of this kingdom is still obscure, but might probably be explained by a translation of the life of Campila Rajah, a MS. in our possession.

Dowlatabad, the rebellion of the Mahomedan chiefs of Deckan, and the dissatisfaction of the nobles; with the revolution by which the new Mahomedan state of Deckan was formed under the Sultans of Culburga and Beder, are now well known to Europeans; but the cause of the cessation of their inroads, by which for 364* years, the Southern Hindoos were left to themselves to form new states and new governments, is not so clearly understood perhaps, nor that with considerable success they repelled the forces and repeated efforts of

these warlike enthusiastic Northern nations. One of the chief causes proceeded from the new Mahomedan states early splitting into four or five different principalities, who were constantly engaged in hostilities with each other, till religious zeal on their side, and imprudent arrogance on that of Ram Raj, brought on the last war that terminated in the subversion of the Hindoo monarchy; otherwise there is sufficient evidence to think, that some of them (the Adil-Shaha and Dowlatabad chiefs) would have rather supported the Hindoo state as a check to their rivals, had they not been goaded on by religious prejudices.

52. Exclusive of the revolt of Deckan chiefs about this period, the Northern hordes appear to have approached the limits of Hindostan, and we find them harassing the empire, by turns defeated or bribed from 1295 till 1326; when their leader, Seri, of a tribe named Zagatai, then entirely new to Hindoos, was induced by a sum almost "*the price of the empire*" to retire, an act of improvidence, which joined to their growing confidence in their numbers, stimulated by exaggerated ideas of the wealth of India, or rather of the Deckan, (for in fact from Jellingana, Waruncull and the Carnatic, were supplied those immense† sums that could be only reck-

Weakened by intestine divisions and four governments formed by the Patans.

The Northern tribes of Moguls appear on the frontiers of Hindostan

A. D. 1295.
 „ 1303.
 „ 1305.
 „ 1326.

* From 1300 to 1664.

† It is difficult at first to conceive whence this wealth could come, but when it is recollected that considerable quantities of gold have been worked throughout the Peninsula, added to what might be imported by an early commerce with the Eastward, and reflecting that the constant accumulation of ages had never before been wasted by foreign invasion or expedition, some credit may be given to the quantities said by the Mahomedan writers to be carried off by Allah. It is to be observed that silver was then little known in the Peninsula, and as a coin, is never mentioned in any ancient Records or Grants.

oned by weight.) These tribes uniting in greater force, at last under a

And ultimately establish the Mogul government in India. descendant of the great Timur established themselves on this side of the Indus, and in the govern-

A. D. 1498. ment of Delhi in 1498 under the celebrated Baber, the

founder of the Mogul dynasty in India. This happened precisely three years after Vasco De Gama's arrival in India ; the Moguls then appearing on the North, while the Europeans first arrived by sea in the South.

53. The progress of the Mogul conquests to the South thencefor-

ward, though slow, was unremitting,* till at last Who extend their conquests to the South.

Akbar having subdued the Patans, from that time the Emperors of Delhi turned their views entirely to the South, and at A. D. 1364. the period we are now come to, after taking Doulatabad in

1634, and reducing the whole country to the Godavery into the form of a province, the capital of their Southern conquests was established under the province Allum Ghur, at a favorable situation not far from

A. D. 1654. the ancient Hindoo capital of Deogheer, near the village of Kurkee, where the seat of government was now established by the name of Aurungabad.†

54. The encroaching power of the Moguls from this time forward

considerably weakened the Southern confederacy, And establish a viceroyalty in Deckan, where Aurungzebe contemplates the conquest of the whole Peninsula. and now under an ambitious and enterprising young prince, seriously threatened their existence as independent states ; of the secret views in con-

* In this interval it was that several Mahomedan Missionaries, some of them women, from motives of zeal for propagating Islamism, and agreeable to that fanatic spirit that animated the first followers of Mahomed, came into the Deckan or South of India, forming establishments, and planted the seeds of the faith in the heart of the countries still retained by the *infidels*, as they denominated the Hindoos. The Durgahs of the Owliah at Kurkee, now Aurungabad, and several along the Western Ghauts of Deckan and of Seraje-ud-deen at Culburga, and further South; the Durgahs at Pennaconda near Colar, Secander Mulla perhaps that of Trichinopoly, and in different other places were established previous to the Mogul invasion of the Deckan, and equally proving the unremitting zeal of the Moslem Missionaries, as of the inoffensive, unresisting spirit of the Hindoos, who under their own independent Princes, admitted these fanatic usurpers in some places even to occupy their own temples of religion. Curious anecdotes of this spirit appear in the Kerala Ulpati, or History of the Establishment of Malliallum, in the History of Poona, and in the Memoir of Pennaconda.

† The walls of the city or sharpenna, were, however, only completed in A. D. 1683, on the Emperor's return to Deckan the second time. See Hakeekul, Part III, under that year.

templation of this prince of reducing the Mahomedan provinces of Deckan, there exists an evident proof in one of his letters to his father Shah Jehan, wherein he states, that the representative of the Anagoon- dy family had actually proffered to become Mussulman to obtain his aid in recovering the ancient dominions of his family from the powers of Golconda and Beejapoor, and thence recommends his case to the royal presence, though it is hardly possible to give unlimited credit to a proposition so repugnant to the feelings of a Hindoo Rajah. We may yet believe it might be suggested from political motives, and can however infer, that every encouragement was given to detach the Hindoo chiefs from the Deckan confederacy.

III.

55. It was probably in consequence of these views, and to strengthen their resources by the total subjugation of the lesser Hindoo states in their rear, that the two courts of Beejapoor and Golconda are stated about that time to have arranged that plan of partition of the Carnatic already mentioned, by which either of them were instantly to take possession of the smaller states that were near it, and to retain what they respectively got possession of. We have seen the extent of this plan taking effect in the reduction of the Upper Carnatic as far as the Cavery, by (*candenee*) tribute, or by (*candauem*) established rent, and of the sea coast of Coromandel as far as the Coleroon; but Travancore, Malabar and the lower provinces beyond the Coleroon, scarcely appear to have been visited by a Mahomedan army, from the first invasion of the Patans in the 13th century until the period we now approach.

56. Aurungzebe having marched* into Hindostan to support his views to the throne; and having carried with him the most select officers and troops of his province, and the celebrated Meer Jumlah among them, the chiefs and provinces of the Deckan were left once more to themselves, as the Imperialists acted on the defensive during his absence.

* See Vansittart's Account of Aurungzebe, p. 2, and the Hakeekut, Part iii, under this year.

57. In this interval, they might have strengthened themselves had Weakness of the states of Beejapoor and Golconda. their conduct been directed by the common maxims of policy or prudence; but both these states of Golconda and Beejapoor were now fast verging to their decline. At Beejapoor, towards the end of Secunder Adil Shah's reign, and under the weak minority that succeeded, the court was disturbed, and every measure perplexed by the intrigues of eunuchs and of women, and by the feuds of the nobles, who having acquired too great a preponderance of power, by their factions and arrogance, became fully prepared to receive the yoke of a conqueror; while at Golconda, the sovereign sunk in the extreme of sensual pleasure, or absorbed in the flights of fanatic devotion, abandoned the helm of state to his ministers, who being Hindoos and Brahmins, are supposed to have secretly encouraged the plans of Sheevajee, and instigated the vain resistance to the increasing demands of the Emperor, that could only be* satisfied ultimately by the entire reduction of Golconda to the state of a province.

58. Aurungzebe having by superior policy or stratagem, overcame Aurungzebe ascends the throne. A. D. 1657. his brothers, and confined his father, ascended the imperial throne in the year following, and soon after sent his brother-in-law, Chaista Khan, the chief of the Omrahs,† as subadar of the Deccan, in place of his son Mahomed Mauzim, who was recalled.

59. It is possible that this choice was influenced by the necessity of Sends his generals to check the disorders in Deccan. sending some experienced officer to check the rising disorders in Deccan, where a new genius at once starting up, seemed to throw obstacles in the way of the emperor's design of the universal reduction of the South, and threatened to wrest that prey from his talons on which he had long prepared to pounce. It is also said, he was provoked by personal motives of wounded pride against this new rival of his power, the Marhatta Seevajee, who, in the

* In the Dutch work of Havart, Vol. ii, Chap. 2d, a full detail is given of the state of that court in 1686, immediately previous to the conquest, and of the character of the King and his ministers.—This work appears to have been unknown to Orme when he published his *Historical Fragments of the Mogul Empire* in 1782. It is barely quoted in the notes of the late edition.

† The recall of Mahomed Mauzim and the mission of Chaista Khan-Ameerul Omrah is mentioned by Vansittart under this year, p. 25.

short space of three years had not only wrested the Concan and the numerous hill forts of the Ghaats, from the government of Beejapoor, but had even dared to intrude on the contributions and territories of the settled Mogul provinces. (Mamalik Maroosa.)

60. It is not necessary here to enter into the events that crowd upon Where Seevajee the attention in this remarkable period ; nor the ^{stirs up the Marhattas for the first time} cause of these successes, which encouraged an obscure adventurer, a young man, assisted by none of the usual advantages of royal birth, or high pretensions from military experience, to contend at first successfully with the armies of experienced warriors formed by the wars of the Deckan, and ultimately with the more redoubted armies of Hindostan, flushed with their late conquests and victories in the contentions for the crown.

61. It should not however escape observation, that much of his success was owing to the popularity of his cause, and we Reflections on the causes of Seevajee's extraordinary success. may suppose that the Hindoos, in this enterprising young chief believed they saw one of those heaven-inspired heroes that they were told was to appear, to deliver them from foreign oppression and thralldom, the rigorous edicts of the Emperor also in regard to their religion, whereby a poll tax, (the Jessyah,) was laid on every Hindoo, doubtless encouraged these ideas of resistance ; ideas which Seevajee by every pretension of the favor of heaven, communicated by celestial visions,* sedulously endeavored to keep up. And his enterprising character. A. D. 1672. A. S. 1594. His negotiations with the Imperialists, his journey to

* There seems no reason to doubt but that Sevajec himself and his adherents countenanced the idea of his being under the immediate protection of a guardian deity, whose votary he professed himself to be, and by whose inspiration he pretended to be directed ; and the Hindoos were willing enough to believe it, as we see by the frequent annunciation of the appearance of Veera-Bhoga upon earth, repeated from 1645 down to 1805. In the Marhatta Memoirs of Sevajec, it is stated, that when in the Carnatic, "after the capture of Chendee Killa, he (Sevajec) had an interview with Eckojec raja. He took the fort of Ootoor—Then in shuck 1595 (A. D. 1673,) in the year Pramadicha on the 13th Chcytor-bahool, decreasing moon of April,) on Monday, Shree Bhuvanee (the divinity in a female form) came and remained 5 ghutkas (or hours) in the person of the lord and master, (Sevajec,) and spoke of things to come. She spoke to the following effect : "Then a prophetic promise of universal conquest as far as Caasee is held out, to remain in the Bhonsla family for 27 generations in the presence of ————— who took it down in writing." It is probable this prophecy was fabricated for a particular purpose long after, but we see the ambitious views that at one period stimulated the ambition of the Marhatta nation, in this instance too plainly to be misunderstood.

Delhi, his stratagem and escape, his extraordinary enterprizes against the Beejapoor chiefs, and his success afterwards, form a series of adventures scarcely to be paralleled in Flebustur* history ;

A. D. 1677.

In his conferences with Madana, supposed to have been encouraged on his daring visit to Golconda and to the sudden circuitous irruption into the Lower Carnatic.

and within seventeen years, we find him in consequence of a treaty with the Hindoo minister of Golconda, joined against both the Mogul invaders and their Beejapoor fellow-sufferers, agreeable to that unsteady policy which seemed to prognosticate the speedy fall of both these kingdoms, permitted to

pass by a circuitous route by Golconda† and the Eastern mountains, through the Balla Ghaut, into the lower country of Carnatic, by Tripetty, within thirty miles of Madras, to take possession of the strong forts of Gingee and Vellore, which only a few years before, as is already mentioned, had been captured by the Beejapoor generals.

62. Of this design and plans, evidence exists in the records of Ma-

His expedition against Gingee. Traits of character evinced in his requisitions from Madras.

dras, where the factory then but newly established, and garrisoned by two companies of mixed troops, were in much alarm for his designs, and endeavored to propitiate his good-will by presents

suitable to his taste‡ and to their situation at the moment. His request of engineers and ordnance from the Europeans of Madras confirm the anecdotes related in his life, of his ideas of the advantage of strong-

Contrasted with the unskilful operations of the Imperialists.

holds and fortifications to a new formed state, and we find this curious illustration of character well contrasted with the little skill exhibited by the Mogul generals in attacking the wretched fortresses of these times ; a fact sufficiently established in the long protracted sieges of Chagna, Golconda, Gingee, and Waken Kaira, some of which lasted ten years, and tended to spin

* In his earlier adventures, there is a striking resemblance to the mild enterprizes of the Buccaneers, or Flebusturs.

† Havart mentions his visit to Golconda, A. D. 1676, Vol. — p. — and the alarm it occasioned at that effeminate court.

‡ In May 1677, he came within 2½ coss of Madras, (Mad. Records.) A curious account is given in the Marhatta Memoirs, wherein his route is described, and of his excursion from the banks of the Kistna into the wilds of Purwuttum, where in a fit of frantic devotion, he was about to relinquish all his ambitious projects, and was with difficulty withdrawn by his confidential friends. He appears at times to have been subject to fits of remorse, and the wilds of Purwuttum are certainly well calculated to inspire the most gloomy ideas.

out a destructive warfare of twenty-five years, of whose effects the South has not yet entirely recovered.

63. On this expedition, it is said, he attempted to wrest Tanjore from his brother Eckojee; though some uncertainty hangs over it, if it be at all true, as Eckojee is stated to have only got possession of Tanjore in 1675; and Sevajee returned to his own country in October* 1677, so that he only passed one year in the Carnatic, however employed. But by this expedition (by late and authentic materials,) he is stated to have acquired countries yielding a revenue of fifty lacs of hoons, dependent on the strong fortresses of Gingee, Vellore,† Colar, &c.

64. The generals of the imperial troops had been repeatedly changed in Deckan by the emperor's order, who though so far distant as Cabul, yet could have notice in fourteen days of every interesting transaction; no less than five of these officers had been changed within the last eighteen years, from‡ 1657 to 1675, when Khan, who was then the general, undertook the siege of Beejapoor with the collected forces of the South, and a serious engagement ensued on the Beema. Though many of the discontented nobles had fled to different quarters, the general Abdul Kerrim made a gallant resistance, and the action was not decisive.

65. In this first campaign, Beejapoor was assisted by the Hindoo minister of Golconda, who seemed then at last to have felt the common danger. Among the auxiliaries on the side of the Imperialists, was Islam Khan Rhoomee, the fugitive Basha of Bussora, with a body of Toorks; vast numbers of Rajapoots also served in the emperor's army under their chiefs. A second engagement ensued scarcely more decisive, but the imperial general found means to bring over many of the dis-

* Tanjore Memoirs. Anquetille du Perron's Recherches Historique.

† Madras Records and Memoir of Sevajee.

‡ In 1657, Sultan Mahomed Mazim.

„ 1659, Chaista Khan.

„ 1664, Mirza Raja Jey Sing.

„ 1666, Sultan Mahomed Mazim, a second time.

„ 1671, Maharaja Jeswunt Sing, } Deputies.
 „ Mohabut Khan,

„ 1675, Khan Jehan.

affected fugitive chiefs of the Golconda army, and finally effected a truce with Abdul Kerrim Khan, by which a resident was received at Beejapoor; and that general appears to have undertaken soon after to bring Hyderabad into the imperial possession.* In this interval Culburga and Nuldroog were both surprized, and Abdul Kerrim engaged in an intrigue to displace Khan Jehan, the imperial general.

66. That officer being in consequence recalled to court, Dillere The general changed. Khan was appointed to conduct the war, and the armies marched against Hyderabad; but were forced to fall back by the firmness of the Deckan nobles of Beejapoor, who on one occasion are stated to have had 70,000 men in the field. On their return to Bee-

japoor on the death of Abdul Kerrim, great confusions ensued, and the troops mutinying, Dillere Khan was obliged to return to the province, after an expensive and disgraceful campaign, in a manner leaving Beejapoor in possession of one of their Deckanee chiefs, Siddee Masood.

67. But the emperor firm in his plans, and inexorable in his resentment, though at so great a distance, persevered in his first design of reducing the country; and orders were sent to entertain all the Beejapoor and Hyderabad Afghan chiefs, most of whom had been now brought over by proportionate offers of rank and jagheers; 20,000 horsemen on one occasion were enrolled at once on the pay lists; and every exertion was made for the purpose of carrying on with effect, the most formidable operations against the Mahomedan states of Deckan, and the rising Hindoo chiefs.

68. In this interval, Sevajee had not been idle. When not employed in increasing and forming his army and fleet,† he took every favorable occasion of seizing some fort, or reducing some province from one or other of the contending parties. He at one time had made a descent

* The ancestors of the Afghan or Patan chiefs of Sanoor, Canoul and Cuddapa were among the number.—See Memoirs of these families.

† In the fleet or army, it is stated in the Marhatta Memoir, that he embarked 40,000 of his mavelle, and after plundering Basaroor, Sedaseevadroog, and probably all the sea ports (which occasioned an unusual terror on that coast,) and even not sparing the sacred temple of Gocurnum, he obliged the celebrated Sevapa Naik by treaty, to pay him annually 3 lacs of hoon, p. 37. His intention of extending his conquests to Casee (Benares,) is stated in his remarkable conference with Mahomed Cootub Shah at Golconda, a scheme of universal conquest, which appears to have been nearly realized by the Marhattas afterwards.

on the sea coast of Bednore, when he embarked on his own fleet, and carried off an immense booty from Barcelore. Even the succession of his eldest son Shambha, who had thrown himself on the protection of Dellere Khan in the former year,* did not disconcert him; and he had prevailed upon him to return; but soon after, contemplating vast

Dies in the midst of vast projects. projects and enterprizes for extending his newly-formed state, this extraordinary man died† amidst an army and a government that was formed by his own genius, and supported by his enterprizing spirit and perseverance.

69. In the following year, the Mogul in chief was again changed, and Dellere Khan‡ recalled, and Khan Jehan a second time recalled from the North. The Marhattas appear in this interval to have increased in numbers in an extraordinary degree, and prosecuted the war on their side with vigor. As we seldom meet their name before, doubts have been entertained whether these countless hosts were really of a nation who can scarcely be imagined to be contained within the narrow precincts of the ancient Maharastra Dasum. To resolve this doubt, it should be recollected, that a great part of the armies of the late Nizam-Shahi§ Sultans and of Bejapoor were composed of these tribes, who now resorted to their own native chiefs under a national standard, which swelled their importance, and inspired increased confidence in a cause they deemed their own; and it is probable, the fanatical rigor of Aurungzebe also excited a spirit which he could not now suppress, and this augmented that rancour and inveteracy which seems to have invited all the Hindu tribes of the Deckan at once to appear in arms in a cause that was deemed national.

* From Scott, but his dates err sometimes from 2 to 3 years, owing to some error in the computation of the Higera.

† The death of Sevajee happened, according to an authentic MS. of his life and actions, in the Hindoo year Rowdree, 1602 A. S., or A. D. 1680.

‡ Dillere Khan on his recall is said in the Marhatta Memoirs, to have been poisoned by the Emperor's orders, who was dissatisfied at his allowing Shambha to return to his father; the generosity and good faith of Dellere Khan on this occasion is highly praised by the Marhatta author, though it did not meet with the approbation of his master.

§ In the Ram Raja Cheritra it appears, that in the memorable war and battle wherein the last monarch of the Carnatic fell, great numbers of Marhattas fought in the army of the Sultan of Ahmednuggur, who was in fact sovereign of the Maharastra Dasum, and the names of their chiefs are mentioned. The same conciliating policy that induced these Hindoo tribes to fight under Mahomedan standards then, would in all probability have secured their attachment to Aurungzebe.

70. Their resistance was now become serious and formidable; it

To extirpate Shambha and reduce the the Marhattas, and perhaps excited by doubts of the zeal of his generals.

had been long continued, and under a young and enterprising leader,* serious consequences might be expected from a longer protraction of the war. Some suspicions also seem still to have attached to the

generals employed; and on consideration of all these circumstances, the emperor appears to have this year determined, with avowed design of rooting out Shambha,† to conduct the operations in person,

The Emperor resolves to prosecute the war in person.

or at least to be near enough to correct errors; having previously recalled Khan Jehan, and appointed Mahomed Mauzim again to be governor of Deccan.

71. Aurungzebe marching from Azmere, followed by a vast army

A. D. 1682.

Arrives in Deccan a second time with a vast army.

The war renewed with vigor.

Extent of the new Marhatta state in this interval.

The invasion of Beejapoor renewed, and continued to the final capture of that capital and of Golconda. A. D. 1687.

composed of Hindoo Rajpoots, as well as Mahomedans, arrived at Burhanpoor in the beginning of the year 1682, and in the 25th year of his

reign, and in a short time arrived at Aurungabad, from which ascertained period, we may reckon

his return into Deccan. The war was then commenced with renewed vigor, both against Beejapoor and the Ganeems, (or infidels as they affected to call the Marhattas,) who had in the period of his

absence, wrested from Beejapoor not only the whole Concan and the Upper provinces along the Western Ghauts, from Baglana to the Sanore province South, but even made themselves masters of some part of the imperial provinces. Notwithstanding a constant opposition, after various successes, the Mogul armies were at last put in motion both against Beejapoor, (where the king was at that time a minor,) and Golconda. After many fruitless attempts to ward off his unceasing attacks, the king and city of Beejapoor were taken in 1687, and

* Shambha at first seemed to evince his father's spirit in seizing the reins of government attempted to be wrested from him by a party united by his step-mother Soora Bae, who wished to elevate her son Rama, the same who afterwards stood a long siege in Gingee, but he soon fell from this elevation, though in his conference with Aurungzebe he exhibited a portion of the family spirit that has conferred on his name and his tale all the decoration and lustre of the Hindoo drama and romance.

† It is not improbable but he was particularly provoked against Shambha at this time for receiving his fugitive son, Prince Akbar, who had escaped from Azimeer, and thrown himself on his protection. We find that notice was sent to the European factories in the Golconda territory early in the year 1682, but the English prudently declined any interference.

soon after Golconda also fell.* Thus both these states falling at the same time, the Mogul power was at once extended over the whole of the late divided Mahomedan governments of Deckan, and precautions were speedily adopted for reducing the Hindoo chiefs, considered as their dependents to the Southward.

72. One of the first measures after this event was to send Cassim

Reduction of their Southern dependencies followed. Cawn, as plouzdar, over the province of the Carnatic, lately dependent on the two governments of Beejapoor and Golconda. That of the former is already stated to have consisted of the settled districts of Serah and Baugalore, with the forced tributaries, as the poligars of Harponelly, Raidroog, Coonderpee, Anagoondy, Bednore, Chittledroog and Mysore; but at this time they do not appear to have carried their arms across the Cavery. That province was now denominated the *Carnatic Beejapoor Ballaghaut*, while the more Easterly provinces, lately dependent on Golconda, composing the late Circars of Cuddapa, Cummun, Ghooty and Gandicotta, &c. were denominated *Hydrabad Carnatic Ballaghaut*; and the provinces below the Ghauts along the sea, extending as far South as the Palar, were denominated *Hydrabad Carnatic Payen Ghaut*, and the whole placed under the supreme command of a plouzdar, or officer possessing military and civil power, entitled a Nabob, the source and origin of the future Nabobs of the Carnatic; a circumstance perhaps not sufficiently attended to, of late years, from the separation of the two Mogul provinces, and rise of a new power in Mysore, the upper or original province of the Carnatic.

The Carnatic formed into two provinces.

The Hindoo chiefs considered as the Zemindars dependent on them.

73. Of the changes that had in this interval of thirteen years taken place in the internal state of that country, it may suffice cursorily to notice, that the new native powers of Mysore, Bednore, Chittledroog and Raidroog had availed themselves of the difficulties of their earlier adventures, the Patan states of Golconda and Beejapoor, who were entirely occupied in repelling the Moguls, not only to increase their acquisitions of territory,

A. D. 1670. place in the internal state of that country, it may suffice

„ 1682. cursorily to notice, that the new native powers of Mysore,

Brief notice of the state of the Carnatic during the late war.

And of the power of the Mysore, Bednore, Chittledroog and other native states.

Improvement and wise internal ma-

* After the fall of Beejapoor, he immediately marched against Golconda, which was closely besieged from 2d February to 2d October 1687, when it was entered by treachery. Havart, Vol. 2d, p. — also Madras Records under that year.

agement of the Mysore and Bednore chiefs. but to consolidate and improve their resources by a system of management rather to be looked for in happier times. This was more particularly the case in Mysore and Bednore, where the civil arrangements of Chick Deo Vadeyar in the former, and the sisloo or established assessment of Sevapa Naik in the latter, are still considered as models, well adapted to the nature of the country, the habits of the natives, and with great probability presumed to be founded on the more general system that once prevailed throughout the country. It is a fact well ascertained, that these standards of internal economy were established at a period when the neighbouring more powerful states were involved in all the horrors and distress of foreign invasion, or of internal weakness.*

74. Of their origin and gradual steps by which these chiefs had established themselves in the Upper Carnatic, another progress referred to another occasion. their occasion may offer of being more diffuse;† but as much of the then condition of the Carnatic Ballaghaut, however, may be understood from the state in which it already was, about the period of the death of Chick Deo of Mysore, we shall only interrupt the course of the narration here, briefly to notice the establishment and growth of the European establishments on the coast, which at this time begin to emerge into notice, amidst the transactions in the lower country, and its reduction first by Golconda and Beejapoor, and afterwards by the Mogul power.

75. While the war raged in the centre of the Deckan, particularly in the country North of Beejapoor and Golconda, the provinces South of these capitals seem to have enjoyed some respite from alarm, save alone what arose from the warfare of petty chiefs, or the rumors of the long threatened but protracted invasion of the Moguls. From North to South along the coast, a line‡ of European factories had been settled

* Sevapa Naik died in A. D. 1661 after a reign of 19 years.—See Bednore Memoir———
Chick Deo died in A. D. 1704, after a reign of 32 years, from 1672, the very period in which the war with Sevajee, Beejapoor and Golconda was carried on with unceasing fury. Chick Deo assumed the regal state in 1700.

† A concise view of the origin and progressive growth of the territory and power of the families of Mysore, Bednore Ickery, Raidroog and Chittledroog in the Upper Carnatic, and of those of Madura, Ginjee, and Tanjore (not the Marhatta family,) in the lower country, erroneously called Carnatic, is in hand; but will require sometime to consult authorities.

‡ An ample Account of the establishment of the Dutch factories of Tutocorin, Negapatam,

since the close of the ancient Hindoo regime, and under the sanction of the new lesser states, who from the earliest period seemed inclined to encourage these settlements from motives of benign encouragement to their subjects' trade and commerce. The Golconda kings also, from undoubted evidence,* appear to have embraced the same maxims. The difficulties sometimes occurred from the exactions of their governors; and factories were established even in the interior and more remote parts of the country of Golconda, which have since that period of devastation and ruin, been consigned to oblivion.†

76. The invasion of the Gingee country, and of that along the coast

by the Beejapoor generals, and soon afterwards by Sevajee, had indeed interrupted their tranquillity, and considerable devastation appears to have taken place in the tract extending to the coast from the Palar to the Coleroon, where the commerce and industry of the country received a shock that it did not recover for many years;‡ but this devastation seems not to have extended into the province of Tanjore, South of the Coleroon, wherein Eckojee appears to have exercised a regulated system of administration, much resembling the model established by his father in the districts of Bangalore and Colar, and which was attended in that country with an in-

Tegapatam, Sadras, Pullicat, Masulipatam, Dacharam, Bimlipatam and their commercial lodges at Golconda and Nagulvansa, are given in Havart's work, published at Utrecht about 1692; also in Baldeus and Valentyn. They were established before the first voyage of the English to this coast, and the Dutch appear to have opposed their forming a commercial establishment at Pullicat so early as ——— See Flori's Voyage in Astley's Collection, Vol. — p.—

* See the series of 14 Grants or Firmans by the Golconda government to the Dutch (in Havart) for Negapatam, Masulipatam, &c.

† Travelling by accident by Nagulvansa, not far from Cummamett in the Nizam's dominions in 1797, a part of the country overrun with jungle, and shewing evident vestiges of better times, I accidentally met with a Dutch tombstone, which led to the discovery of the riches of their factory. In Havart's work this inscription is preserved, and we there meet an account of that establishment and of its capture during the invasion in 1687. It is needless to observe that it has lain in ruins ever since, and the whole of that country, which then furnished cloth of a particular kind for a Dutch investment, has never recovered the calamity.

‡ Baldeus under the year 1660 says: "The king of Beejapoor not long before made an inroad into the country of Tanjore: and the marks of the famine are still visible, p. 588; we may therefore suppose the few years before to coincide with the period of 1657, but this devastation extended only to that part of the country of Tanjore which extends along the coast about Negapatam and Porto Novo, where the Dutch investment and factories were ruined.—See Havart.

crease of national wealth that has extended to near our own times, and might even vie with the most flourishing state of Agrarian improvement that has been attained in civilized Europe.*

Eckojee's conduct is best explained by referring to the history of his earlier life, and to the difference of character exhibited by the two brothers, sufficiently apparent in the account of their conference, and the fruitless attempts to induce him to extend his dominions by conquest; the forbearance that on this occasion, and under such temptations he shewed, induce some doubts of the fidelity of those accounts that represent his acquisition of Tanjore to be attended with peculiar circumstances of flagitious rapacity; but whether that expedition was influenced by motives of obedience to his liege† sovereign as alleged, or of a spirit of adventure and chivalrous enterprize, not unknown to the Marhatta tribes at that period; whatever might be the exciting causes of Eckojee's expedition to Tanjore, it was conducted with an address and

And after its acquisition, rejected the proposal of extending his conquests. decision highly favorable to his reputation as a statesman and warrior; though he appears immediately after to have relinquished the last, for the more pacific occupation of improving and systemizing the natural resources of a fertile country; and thus he furnishes a third instance of a Hindoo chief studying with assiduity the internal economy of his state, with a success that enriched his subjects, and ennobled his name. These remarks on the first Marhatta administration may not be out of place here, in explaining the state of that country, on whose coast the most considerable European factories were then situated.

And applies to the internal improvement of his country. 77. A more detailed account of the progress of their establishments (particularly the English,) would be interesting, and not without its use; but it is not consistent with the brevity of this attempt, or the defective accounts within our reach at pre-

Documents of the early state of the English settlements.

* The countries on the Po, under the systematical arrangement of the Cadastre, and by recourse to irrigation, are presumed to be the richest and most productive lands in Europe, excepting the Flemish Netherlands, nearly equally productive and populous.

† This European phrase is used with some diffidence. It is expressly stated, that he was called in to the aid of the Tellinga Naik of Tanjore, as a general of Beejapoor, and it would appear from the language put in his mouth, that he admitted this: "We are managing the affairs of the Padshah of Beejapoor, and in his service, therefore it is not proper to act against the Padshah."—Marhatta Memoir:

sent, to extend it beyond a rapid sketch. In such documents as exist of our national records, the accounts of the native governments, of their

Unsatisfactory. history, politics, and of the geography of the country are vague and unsatisfactory; indeed our countrymen do not appear to have then conceived it necessary for their views to enquire much further than what immediately related to their investments and commerce close to the coast, and an entire indifference, if not ignorance of

Occasionally dis- the real state of the country prevailed. At all
 turbed by the trou-
 bles of the country. times they appear to have been under considerable alarm for the safety of their settlement, and their employers' interests, though not an instance occurs of inhumanity or ill-treatment from the natives, Mahomedan or Hindoo, such as of late years, the irritation of warfare, or the disappointment of ambitious projects may have occasionally produced; and which might then have been supposed with some reason to have excited apprehensions amongst contending nations for their personal safety. Various instances occur of individuals pass-

And by conten- ing safely throughout the country. Among the causes
 tions among the na-
 tive settlers. of alarm, we find the settlement at times by the contentions among the castes and tribes of new settlers, and the whole of the working and most useful lower classes induced to abandon the new-formed colony, and recurring to a secession to the neighbouring settlement of St. Thomé, at whose expense most of the population was avowedly formed originally.

78. The settlement of Madras was originally established about A. D. 1639, being transferred thither from Armigam,* No record of the first 33 years. where the half-finished ruins of their first fort still remains. Of the founding of the colony, and of the first 33 years, no records whatever appear. Their first attention to the politics of the native powers seems to have been powerfully excited by the sudden appearance of Sevajee so near to Madras; they then deputed an agent to his camp, after whose return they ap-

* Armigam is situated near Durajapatam on the Coast, 60 miles North of Madras. I had an opportunity of seeing these remains in 1798, consisting of two small bastions on a single curtain of brickwork of no great extent; the occasion of the removal is not well known, but it appears that the fort was never finished. The first Grant of Madras by Sree-Runga Rayel in A. S. 1561 or A. D. 1639, was inscribed on a golden olla, which is said to have been lost at the capture of Fort St. George by La Bourdanaye in 1747.

pear to be better acquainted with the state of parties, and notices occasionally occur of a more intimate knowledge of the native character, and a greater confidence in their own strength and superiority A. D. 1686. in arms, even over that of the more powerful Mogul
 „ 1687. emperor, against whom the three English establishments actually made war in the height of his success; and this confidence we may presume, naturally cleared the way to those events that on the general confusion succeeding Aurungzebe's death, led to the establishment of our power in this quarter.*

79. On an attentive inspection of all the documents of these times that have come into our hands, it appears, that though the Mysore chiefs had as yet no connection with the Eastern sea coast, their name was known and even respected in the lower provinces along the coast, and that though they had yet no political relations with that country, the successful resistance of the *Naig of Mysore* (as he is called) to the depredations of the Marhatta armies of Sevajee, was well known at Madras.†

80. The factory of Fort St. George only established — years before, was still so weak and ill-manned, that a considerable uneasiness arose from their state among the contests of the hostile parties; they yet conducted themselves with a considerable degree of prudence and caution, and while they sent compliments, antidotes and counterpoisons, to Sevajee, they prudently declined complying with his special request of military aid; and when the Patan chief Daood Khan, soon afterwards approached, after the conquest of Gingee, they no less sagaciously accommodated themselves to his favorite humors, in consequence of which they were not only saved from the threatened spoliation, but obtained grants of land, of villages, and of factories from all parties ‡

81. The Dutch on the other hand, who had been earlier established on these coasts, and whose power in India had been more firmly consoli-

* Consultations at Madras, and correspondence with Surat and the Bay on the subject of the intended attack on the Mogul, and on the subjects of Siam in 1686.

† Madras Records.

‡ The factory at Cuddalore was purchased from the agents of Rama at the moment he left Gingee in 1692 for 30,000 pagodas, (see Havart,) St. Thomé, Egmore, &c. three villages were purchased from Daood-Khan in 1693; they had long sought it, and were uneasy and apprehensive of the French designs to settle there.—Madras Records, 1701.

dated under the general government established at Batavia, appear about this time to have felt a sensible decline of their commerce and trade on the coast of Coromandel, in consequence of which, a Commissary General with unlimited powers had been sent out to enquire, and reform their establishments on the coast. The celebrated Van Rheide,* (a name well known to the cultivators of Indian science,) appears to have executed this invidious duty with a rigor and zeal that excited those compliments and remonstrances that are ever found in public reforms to follow individual inconvenience. His death happening at sea, proceeding to Surat, prevented the further execution of his plans, which from some of the works published in Holland about that time, appear to have been loudly inveighed against by their servants in India. Even the industrious Havart gives place to too much of these invectives, to warrant a full credence of his reflections on the plans of reduction and reform, of which the expensive fortifications of Negapatam, and the removal thither of the seat of government on the coast, formed a part. How far they were followed or departed from, does not appear; but it is observed, that the decline of the Dutch power and commerce on this coast from that period, proceeded with a slow though imperceptible progress down to our own times.

82. The Dutch, however, appear to have been then sufficiently sensible of the weakness of the Golconda government, since they ventured to seize upon the fort of Masulipatam, then a very considerable mart (in 1686.) in retaliation of some commercial injuries scarcely warranting such a measure; but they restored it soon after, in the November following. Immediately after the conquest of Golconda, they sent an embassy to Aurungzebe, and Mr. Bacherus obtained some immunities, and a renewal of their privileges.

83. In perusing the works from which these notices are derived, it appears that the Dutch Company's servants had by special orders from Europe paid particular attention to acquire and methodize an useful knowledge, not merely of the commercial advantages and trade of their own establishments, but of the internal resources, geography,

* Henr. Adr. Van Rheide after having served long in India and returned to Europe, was sent out in 1684 on a salary of 1,000 guilders per month, to reform the Dutch establishments. He was on the Coromandel Coast from 1684 to 1687, and died at Sea in December 1691 near Bombay, on his way to Surat.—Havart, Vol. 111, p. 59.

history, politics and literature of the states and countries in which their earlier settlements were situated.

84. In pursuit of this useful species of knowledge, some of their servants appear at least to have distinguished themselves by a perseverance not unsuitable to the prevailing habits of that nation; and the scientific works of Rumphius* and of Van Rheide, and the historical works of Baldeus and Rogers derived from this source, will always draw approbation. The first of these are more generally known, than the humbler, though equally useful, labors of Valentyn† and Havart, who at this period cultivated a walk that furnishes the first specimens from India of works, forming an useful basis and aid to modern‡ speculations on the political economy of these countries.

85. Even in those tours which their servants occasionally made from one factory to another, their journals convey a degree of information that, not long since, was rare; and would have been desirable to the historian, the naturalist, or the geographer; and which, there is reason to suspect, was lately little known in England.

86. The factories of the other European nations at this period appear to have been of little importance. The Dutch commerce, notwithstanding the sums expended in fortifying Negapatam, had fallen into a mortal state of decay. The Danes at Tranquebar maintained a doubtful and interrupted communication with their mother-country,

* The Thesaurus of Rumphius, and the Hortus Malabaricus of Van Rheide contain extensive and useful details of the Natural History of India. It appears that Van Rheide also extended his enquiries to various other branches of useful knowledge. A classification of the 72 tribes of the inhabitants of Malabar, prepared at his suggestion, lately came into my hands written in old Dutch: the writer notices that it was prepared for Van Rheide.

† The work of Valentyn consists of 8 huge folio volumes, containing, among much rubbish, most useful details of all the Dutch settlements and forts beyond the Cape of Good Hope. Among them is an account of the history and state of Persia, and a History of the Mogul Emperors, with details not known in England till Dow's work appeared in 1772. The work of Havart, published at Utrecht in A. D. 1692, professes only to give a view of the rise and fall of the commerce of the Coast of Coromandel: though loaded with the characters, epitaphs and eulogies of Company's servants, it yet contains a faithful picture of the times, and a just account of the court and politics of Golconda at a very interesting period immediately previous to this conquest. The visit of the king to Masulipatam, the account of Mr. Pitt's Embassy to Golconda, and the notices of Sevajee, are curious; and the papers on the Indian manufacture of steel, and the account of assaying gold at the mint of Pullicat, are useful.

‡ The same sentiments and turn for cultivating a knowledge of political economy appear to have prevailed still later, and gave rise to the establishment of an Asiatic Society at Batavia in A. D. 1780, in the eight Vols. of whose proceedings several very useful papers appear.

while their reputation among the other European settlers suffered, as a commercial establishment, by proceedings stigmatized as little short of piratical. The respectable Protestant missionary establishment had not yet been established, nor the labors of the Apostolic Zinganbalg and his successors begun. The French after the loss of St. Thomé had not yet retrieved their military reputation among the Hindoos, and the establishment at Pullicherry was yet in its infancy. Of the Swedes nothing was heard, and the once vast power of the Portuguese on the coasts of India was now restricted to Goa. With the Spaniards of Manilla, some intercourse of commerce by annual ships appears to have been maintained from Madras, by which a certain quantity of silver was annually imported; but by far the greater quantity of that metal, which appears to have been but recently introduced into India, was imported directly from Europe, together with a certain proportion of gold, a species of commerce that has now entirely ceased.

87. Notwithstanding the competition and rivalry incidentally arising from the pursuit of the same commercial views among the European factories at this period, an amicable spirit and mutual civilities prevailed in their intercourse in this distant part of the world; nor is it less honorable to the memory of the founders of this colony, to observe the early English discouraging and forbidding the traffic in slaves, of which the nation has at last signified its marked disapprobation. By a proclamation so early as 1686, the government of Madras forbid in the most positive terms the exercise of this commerce within their limits, and of which the long continued war and a destructive famine of two years, (1686 and 1687,) had increased the usual bounds, and this discouragement of a traffic that even met the sanction of national treaties* in the West, has in the East been continued to be viewed with disgust to our own times. †

88. Such was the general state of the country of Carnatic, comprehending the upper provinces, or Balla Ghaut as now called, and the lower tracts on the Eastern coast, then called in European

* The Assiento Contract by which the nation sanctioned the supply of the Foreign Colonies of Spanish America with slaves from Africa is alluded to here, and the several transactions connected with it.

† On reducing the Dutch Colonies in Ceylon in 1795-6, the British commanders early forbid, by proclamation, the trade of slaves from the coast, whence numbers it appeared had been fraudulently kidnapped and conveyed away.

writings Coromandel, when the conquest of Golconda and Beejapoor opened the way in this year to the extension of the Mogul dominions, and their system of financial administration was first introduced and proposed to be extended along with their arms into the provinces of the South.

In considering the gradual changes in the state of the Carnatic, the next great period that attracts attention and interest, comprehends nearly 55 years, from the conquest of Golconda and the Carnatic until the formation of the Dufter Assoofiah, soon after the return of Assoph Jah into Deckan, and assuming independency.

In this period comes to be considered the progressive extension of the Mogul system of government into the South, the causes that retarded a more rapid and general progress, arising in the civil wars that arose among the successors of Aurungzebe, which afforded room to the new Mahratta state to strengthen and expand itself; and ultimately weakening the provincial Mahomedan government, gave rise to three modern states in the Deckan independent of all control, and the two Nabobships of the Carnatic, gradually terminating in the government of Mysore and that of the Carnatic Payen Ghaut.

(*To be continued.*)

Notices of various Mammalia, with Descriptions of many New Species :

By ED. BLYTH, *Curator of the Asiatic Society's Museum, &c.*

PART I.—THE PRIMATES, *Lin.*

Simiadæ. When last I had occasion to treat of this group, I remarked (*J. A. S. XII, 176,*) that, at that time, the only ascertained species known to inhabit the countries bordering on the Bay of Bengal to the eastward, were the *Hylobates lar*, which I suggested to be the most common species of Gibbon found in the interior of the Tenasserim provinces, as alluded to by Dr. Helfer,—and *H. syndactylus*, which, according to that author, extends as high as 15° N. lat., a statement which, however, it would be satisfactory to have confirmed. It now appears that the *H. lar* is diffused so high as Arracan, where Capt. Abbott, Assistant to the Commissioner of the province, and who is stationed in Ramree, is acquainted both with it and *H.*

hoolock as inhabitants of that island (?). In Arracan, however, the Hoolock is the prevalent species of Gibbon, and extends thence over all the hill ranges of Sylhet and Assam;* while the *lar*, or White-handed species, is found southward to the Straits. The Society has lately received a pale specimen of the Hoolock from Capt. Phayre (Senr. Asst. to the Commissioner of Arracan, and stationed at Sadoway), which closely approaches to that in the Zoological Society's Museum, which was described as a distinct species by the name *H. choromandus*, being, however, a trifle darker, and considerably darker than the very pale example from Assam noticed in X, 839. Another Hoolock in this Museum is again much darker than the Arracan specimen, and we have retained a third of the usual intense black colour all over, with the exception of the constant white band across the forehead.

According to Mr. J. Owen, who resided upwards of two years among the savage Nagas and Abors who inhabit the wooded mountain ranges to the eastward of Upper Assam, the Hoolock abounds in those upland forests, associating in societies of 100 or 150 individuals, the combined noise of which may be heard to an immense distance. In general, they keep to the tops of the highest Oolung and Mackoi trees (*Dipterocarpi*), to the fruit of which they are very partial; but on several occasions, when emerging from a foot-path through the dense forest into the open ravines formed by the action of the mountain rapids, Mr. Owen mentions having come suddenly upon a party of them washing and frolicing in the current, who immediately took alarm and retreated into the jungle: but in one instance, as he was proceeding solitarily along a newly made road through the forest, he found himself surrounded by a large body of them, impelled perhaps as much by curiosity at his European dress and appearance, as by resentment at the intrusion of a stranger upon their domain; the trees on either side were full of them, menacing with their gestures, and uttering shrill cries; and as he passed on, several descended from the trees behind, and followed him along the road; and he feels sure that they would soon have attacked him, had not his superior speed on the

* It is even found in some parts of Mymunseng. Buchanan Hamilton's *MSS.*: upon the authority of Mr. Dick, formerly Judge and Magistrate of Sylhet.

ground enabled him to escape. Having at first, relates Mr. Owen, to cross a number of felled logs, it was really no easy matter to get away ; but the clear and open road once gained, he was not long in distancing his pursuers. Upon his return, after this threatened attack of the Hoolocks, Mr. Owen asked his Assamese interpreter, (who had been brought up in the hills,) whether it was usual for these Apes to manifest so hostile a disposition ; and he was informed that only a few days before, as a party of Nagas were proceeding along one of the tortuous jungle paths, necessarily in Indian file, the foremost man who was a little ahead of the rest, was actually attacked and severely bitten on the shoulder, and would probably have been killed by his assailants, had not others of his party opportunely come to the rescue, upon which the Hoolocks immediately fled. Indeed I can testify to the capability of these animals to inflict serious injury, from having witnessed a tame female of the Sumatran *H. agilis* suddenly attack her keeper, by springing up at him, grasping his body with her four limbs, and biting at his chest, when it was fortunate for the man that her canines had been previously filed down ; in consequence, as was said, of her having occasioned the death of a man at Macao.* According to Mr. Owen's account, the Hoolocks would also appear capable of destroying large snakes ; for his attention was once arrested by the noise which a party of them were making on the tops of some lofty trees overhead, when after a while he was startled by the fall of a *Python* Snake, of about six or seven feet in length, within a few paces. The reptile was nearly dead, or for that matter might have been disabled by the fall, but it had been severely bitten and lacerated, no doubt by the Hoolocks above, who were unquestionably the cause of its precipitation.

Of the Javanese species (*H. leuciscus*, F. Cuv.), the Society has lately obtained a fine female specimen, the colouring of which is somewhat remarkable, although nearly resembling that of a male described and figured in the unpublished MSS. and drawings of the late Dr. Buchanan Hamilton. General hue pale greyish-brown, or rather

* From what I have seen of the Gibbon tribe when brought up tame, no animals could be more gentle and good-tempered ; but the lady in question had good reason for the utter hatred which she bore to her keeper, who used to make her display her wondrous activity a hundred times a day, in swinging from bough to bough of a large artificial tree by means of her fore-limbs only, by frequent application of the whip.

brownish-grey, darker on the nape, shoulders, and limbs, and the inside of the thighs blackish anteriorly; the outside of the thighs, and the legs and feet above, are pale; the hands are washed with blackish: crown of the head black: a whitish ring encircles the face; the throat, sides of the throat, entire under-parts, and especially the lumbar region, are also whitish, but a dark brownish-grey line extends down each side of the breast and belly, commencing from the arm-pits, and terminating in the blackish inner side of the thighs. As compared with the Hoolock, this species has the coat very much more close and woolly, the hair adhering in flakes, more particularly on the back. That of *H. lar* (the only additional species we possess) is just intermediate.*

I also suggested, upon the same occasion, that the Tenasserim *Semnopithecus maurus* of Helfer would probably prove to be the *S. obscurus*, Reid: and the Society has now received skins of the latter species from Capt. Phayre, and some living young specimens from Capt. Abbott; and the skull of this animal, compared with that of a skeleton prepared from a Tenasserim specimen sent in spirits by the late Dr. Helfer (vide VII, 669), leads me to refer the latter also to the same species, which, it may be remarked, is the only member of its genus as yet ascertained from Arracan southward to the Straits, where (in the vicinity of Singapore) specimens of it were obtained by Mr. Cuming.

* On the subject of Orang-utans, I took the opportunity before referred to, to offer a few remarks (vide pp. 167 and 182). Since then, the Society has fortunately recovered a fine skull of the male *Mias Rambi*, noticed as presented by Major Gregory (VII. 669), which had been missing from their museum, and was consequently unnoticed in my remarks on the genus. I have also lately received a letter from Mr. James Brooke (of the Borneo settlement), wherein that gentleman notices the dark colour of the *Rambi* as compared with the *Pappan* and *Kassar*. He remarks—“I concur in what you say regarding the *Wurmbii* and *Abelii* being referred to one class [species]. The *Kassar* in every specimen which I have seen, is of the same colour as the *Wurmbii* or *Pappan*; but the *Rambi* is of a dark brown in the two I have seen—one an adult female—the other a young but a large male. The *Rambi* is probably intermediate in size to the other two species. I am aware how little general importance is to be attached to colour, but among the very numerous specimens of the *Pappan* and *Kassar* I never found one of this dark colour, whereas the only two specimens of the *Rambi* which have fallen under my notice were both similar and both dark brown. A little further personal enquiry would settle the matter beyond dispute; and I hope soon to have the countries open to me, when I shall feel great pleasure in forwarding you specimens either of skeletons or skins.”

The skins adverted to are those of full grown animals, and they accord very well with the description of the species furnished by Mr. Martin ; but two very conspicuous characteristics of the living animal might pass unnoticed in these skins, namely, the variegation of the face, which is of a leaden-black, contrasting with pinkish flesh-colour on the mouth and lips, extending to the lining of the nostrils, besides which a large semi-circular mark of a paler and more livid tint occupies the inner half of each orbit,—and secondly, a longitudinally disposed erect crest upon the vertex, rising abruptly from amid the rest of the hair of that part, and being analogous to that of the Sumatran *S. cristatus*. (Raffles,) with which I should not be surprised to find the present species identical : Raffles, however, says nothing of the variegation of the face, and he remarks that “the young *Chingkaus* are of a reddish-fawn colour, forming a singular contrast with the dark colour of the adults,” whereas very young examples of the present animal agree in colour with full grown ones ; he also mentions that the under part of the body is merely “paler,” while in the Arracan animal this is dull white, and purer white in the young. In adults, the whole hair of the crown is much elongated, the tuft still rising up among the rest ; and that forming the whiskers stands far out on each side, forming lateral peaks in addition to the vertical one. Five examples before me (three of which are alive) exhibit scarcely any difference in shade of colour, all being of a ashy dusky-black, darkest on the head and extremities, a good deal silvered on the back, white underneath or in front, and the tail more or less albescent either at base only, or for the basal half or two-thirds, or even the entire tail ; there is little trace of beard, and the shortish scanty hairs growing upon the flesh-coloured lips are white. The young, besides a whining noise, to express their wants, frequently emit a mewling cry that might be mistaken for the mew of a cat.

To the same group of *Semnopithec*i belongs my *S. pileatus*, *J. A. S.* XII, 174, a species which abounds on the skirts of the Tipperah hills, retiring far into the interior during the rains, (as I am informed by F. Skipwith, Esq., Judge and Magistrate of Tipperah, to whom the Society is indebted for some interesting zoological specimens,) and it would appear also to extend sparingly upon the Naga range eastward of Upper Assam. A fine specimen of an old male has

just been presented to the Society by the Rev. J. Barbe, R. C. Missionary, which was shot by him during his recent visit to the wild Kookie tribes of the Chittagong hills; and the same gentleman had previously favoured us with a more than half-grown male killed in Tipperah. These two differ considerably in shade of colour from the young female formerly described, having the whiskers, throat, chest, and front of the shoulder, very deeply tinged with ferruginous,—the rest of the under-parts, the legs all round (from the knee), and much of the humerus, less so,—and the head and back of a more dingy ash-grey, being sullied with the prevalent rust-colour: the half-grown female before described has merely a faint tinge of ferruginous on its whitish under-parts, and the back and limbs are very delicate pure grey.* In the old male, the tail is of the colour of the back at base, becoming gradually black, which last occupies the terminal third or more: the fingers and toes are blackish, with an admixture of this on the back of the hands: the long black superciliary hairs spread into two lateral masses (in all three specimens,) and are very copious, and between and above them, immediately over the *glabella* or inter-orbital space, the hairs of the forehead are conspicuously tinged with ferruginous: those on the crown are not elongated as in the preceding species, nor is there any trace of vertical crest; but they are a little lengthened beyond those of the occiput, sinciput, and temples, which they accordingly impend, and thus is presented somewhat the appearance of a small flat cap laid on top of the head, whence the specific name. The length of fore-arm and hand (of the adult male), to tip of longest finger, is above a foot; knee to heel nine inches; foot about seven inches: and length of skull about five inches.

As a third continental species of this subgroup, I suspect must be brought together the *S. cephalopterus*, (Zimmerman,) from Ceylon, with which Mr. Martin identifies the *Lion-tailed Monkey* β , and the *Purple-faced Monkey*, of Pennant, the *Guenon à face pourpre* of Buffon, *Simia dentata*, Shaw, *Cercopithecus latibarbatu*s of Geoffroy, Kuhl, and Desmarest, *C. leucoprymnus*, Otto, *Simia fulvo-grisea*, Desmarest, *Simia leucoprymna et S. cephaloptera*, Fischer, *S. nestor*, Bennett, and *S. leucoprymnus et S. nestor*, Lesson, — and the *S.*

* A half grown male just received from Mr. Skipwith is intermediate in its colouring.

Johnii, Fischer, from the Neilgherries, to which Mr. Martin only refers the *S. cucullatus*, Is. Geoffroy. From specimens now before me I think there can be no doubt of the identity of all of these, and that the species both inhabits the Neilgherries and the mountains of Ceylon: but Mr. Martin erroneously identified one specimen in the Paris Museum with the present species, as I have shewn in *J. A. S.* XII, 170; the animal in question being evidently my *S. hypoleucos*, *J. A. S.* X, 839. The name *cephalopterus* would have to be retained, and the animal appears subject to considerable variation of shade; a half-grown female before me resembling Mr. Martin's figure referred to *S. cephalopterus*, except that the croup is pale-grey as stated in the description, the hair there being shorter; and there is an admixture of this on the thighs, and slightly up the back: the whiskers, and hairs on the lips and chin, are dull white; and those of the crown dull chesnut-brown, and lengthening on the occiput: the tail of this is whiter to the end. An old male, on the contrary, has dark dull chesnut-brown whiskers, concolorous with the hair of the crown, and some blackish hairs growing in front of them; and his tail is blacker to the end: the hair on the crown is all elongated, but increasing in length to the occiput, where some of the hairs exceed five inches in length, and tend to be albescent, a sort of dingy isabella colour prevailing, which is not easy to express in words. On the short hair of the croup, and upon the thighs, the same grey colour appears as in the young female specimen, but is mingled with black, and considerably less albescent. The bodies and rest of the limbs of both are deep black, but picked out a little with greyish in the young female. I consider these two specimens to respectively represent the *S. cephalopterus* and *S. Johnii* of Mr. Martin's work, the latter (or old male) being certainly from the Neilgherries, and the other I purchased alive in Calcutta, and could not learn whence it had been brought: but I am quite satisfied of the specific identity of the two, and have seen others variously intermediate. Upon these grounds I venture to bring the two alleged species together.

The other Indian *Semnopithecii* form a particular subgroup, well characterized by their physiognomy; and all of them have a radiating centre of hair on the forehead, a little behind the superciliary ridge. They have been mostly confounded under *S. entellus*.

The most different from the rest is *S. hypoleucos*, Nobis, *J. A. S.* X, 839, and XII, 170; which is characterized by its comparatively small size, deep colouring, and black fore-arms and hands, feet, and tail; the head being of a dirty pale straw-colour. Inhabits the Malabar range and Travancore.

Next, *S. entellus* (verus), F. Cuv., is the representative of the group in Bengal and Assam, extending (as I have been informed) into Cuttack. It has constantly black hands and feet; the fore-arm and leg externally, with the croup, are of a pale *chocolat au lait* colour, extending more or less over the back, humerus, and thigh; and the rest is of a light straw-colour, or pale isabelline, with occasionally a tinge of ferruginous on the belly. It is figured by the late Mr. Bennett in the 'Gardens and Menagerie of the Zoological Society.'

Very different is the *S. priam*, Elliot, of the Coromandel coast, which has nought of the yellowish tinge, the whole back and outside of the limbs, with the crown of the head, being nearly of the *chocolat au lait* hue confined to parts of the former, but having more of the *lait* in it, and as usual being most intense about the croup; the hands and feet are *pale* and concolorous with the rest of the limbs; the whiskers and occiput whitish; and a strongly marked peculiarity consists in having an abruptly rising erect crest upon the vertex, analogous to that of *S. cristatus* (vel? *obscurus*).

The *S. anchises*, Elliot, represents the former in the Deccan and along the foot of the western ghauts. A skin presented to the Society by that gentleman, with three examples of *S. priam*, resembles the darkest specimens of *S. entellus* in colour, but has the leg from the knee whitish (perhaps not a constant distinction), the hands mingled white and blackish, and the feet whitish, with dusky black above the base of the toes and on their terminal phalanges; but the coat generally is much longer than in *S. entellus*, the hairs on the sides measuring four, five, and even six inches in length, and those which grow upon the toes, and in a less degree those of the fingers, which are very copious, are also remarkably elongated, extending considerably beyond the tips of the toes, which thus present a Spaniel-like appearance. Mr. Elliot, to whom the merit is due of first distinguishing these species, and who is well acquainted

with both of them, will shortly describe their characters more minutely.

The same gentleman has also forwarded for my inspection an imperfect skin of a half-grown animal, received from the Coimbatore district or its vicinity, which presents the colouring of true *entellus*, and has the black hands and feet well marked; but the coat is different in texture, the hairs of it being quite straight, and not exhibiting the waviness which is constantly observable in those of *S. entellus* of every age, causing the light to fall irregularly on each hair of the latter species, while on those of the specimen in question, as in *S. anchises*, the shine is uniform, and the same straightness of hair is observable in *S. priam*: this may appear a trivial distinction, but it is nevertheless a well marked one, which at once characterises *S. entellus* apart from either of the others; and I incline to consider, for the present at least, the skin under consideration to be a doubtful variety of *S. anchises*, the more especially as its coat is also longer than in specimens of *S. entellus* of corresponding age.

Another allied species, of which the description does not tally with either of the foregoing, is the *S. schistaceus*, Hodgson, *J. A. S.* IX, 1212, "from the Tarai forest and lower hills, rarely the Kachar also," of Nepal; and which would seem to approach nearest to *S. anchises*. It is described as — "Dark slaty above; below, and the entire head, pale yellow; mere hands and feet somewhat darkened or concolorous with the body above; tail also concolorous: hair on the crown short and radiated; on the cheeks long, directed back, and hiding the ears: piles or fur of one sort, neither harsh nor soft, more or less wavy; three to five and a half inches long upon the body, closer and shorter on the tapered tail, which is more or less tufted."

The Mussoorie Lungoors have been thus described to me by Capt. Thos. Hutton, from whom I hope shortly to receive some specimens. "I fell in," writes that observer (in a letter dated Dec. 30th,) "with a whole lot of Monkeys this morning, and took a leisurely survey of them; they were dark greyish, with pale hands and feet, white head, dark face, white throat and breast, and white tip to the tail. This is I think the Nepal and Simla species. The *Macacus rhesus* is found here also, but I do not remember it in the winter, though it may re-

main in some of the deep warm valleys."* Elsewhere, he remarks, "I have long thought that the *Lungoor* of our parts must be distinct from the *S. entellus* of Bengal, on account of the different locality in which it is found, for assuredly were the *Entellus* to occur here in summer, it would retire to the plains on the approach of winter. Our species, on the contrary, seems to care nothing for the cold; and after a fall of snow a glen on my estate which opens to the N. W. is crowded with them. In fact, I really believe they are more numerous during the cold than during the hot weather. On the Simla side, I observed them also, leaping and playing about while the fir-trees among which they sported were loaded with snow-wreaths. I have seen them at an elevation of little short of 11,000 ft. even in the autumn, when hard frost occurred every night, and that was at Hattoo or Whartoo mountain, *three* marches in the interior from Simla. * * * It grows to a goodly size, and is rather a formidable looking fellow." Captain Hutton's suggestion that the Himalayan *Lungoor* must be different from the Bengal *Hoonuman*, because of the diversity of climate which they inhabit, is in part nullified by the fact that the *Macacus rhesus* inhabits alike the Himalaya and the Bengal Soonderbuns; and it also remains to ascertain how high the *S. entellus* may extend upon the Northern mountains of Assam: moreover it is by no means clear, from the above descriptions, that Capt. Hutton's Mussoorie *Lungoor* is identical with Mr. Hodgson's Nepalese species.

Returning now to the determination of the *Simiada* found eastward of the Bay of Bengal, Dr. Helfer mentions two species of *Macacus*, stating that "the *Cercopithecus cynosurus* [*cynomolgus*?] inhabits chiefly the banks of rivers, and the mangrove forests, being chiefly fond of shell-fish": and that "Another species of *Cercopithecus* belongs to the rarest of this genus, and is found chiefly in the northern parts, upon isolated limestone rocks." There can be little or no doubt that the two following are the species referred to: and to Capt. Phayre is due the credit of first securing specimens of these animals

* In *J. A. S.* VI, 935, Capt. Hutton states, of the *M. rhesus* — "This species I saw repeatedly during the month of February, when the snow was five or six inches deep at Simla, roosting? in the trees at night, on the side of Jakú, and apparently regardless of the cold."—*Journal of a Trip to the Burenda Pass.*

for examination, the Society being already indebted to that gentleman for numerous other specimens of Arracanese mammalia, several of which are new, and for nearly 200 species of birds, besides specimens in other classes, to all of which he is continually fast adding.

Macacus nemestrinus (?) A huge specimen of what I conceive to be merely the common *Pig-tailed Monkey* of authors, numerous in Sumatra, (where three *varieties* of it are alluded to by Raffles, who terms the species *Simia carpolegus*;) if not also in other parts of the Malayan archipelago and peninsula, differs from ordinary specimens of its race, such as are commonly seen in captivity, in the development of its coat of hair, especially on the fore-quarters,—in having the crown merely infuscated, instead of black (or nearly so),—and in the terminal tuft of its tail being bright ferruginous; besides which, there is a strong tinge of golden-ferruginous about the shoulders. The coat is fine in texture, and upon the fore-quarters the hairs of it measure from four to five inches long; on the loins they scarcely exceed two inches, and on the under-parts are comparatively scanty; the general colour being that prevalent among the *Macaci*, or grizzled brown, the piles annulated with dusky and fulvous; crown darker, and the middle of the back posterior to the lengthened hair is also darker, becoming black along the upper surface of the tail, which has a bright ferruginous tuft as before noticed: but there is no trace of this upon a very young specimen also sent, which has likewise little appearance of annulation to its fur, and the colours generally are subdued and much paler. A live example (of undoubted *nemestrinus*) which I possess, about a third grown, begins to shew the grizzling or annulation to the fur of its fore-quarters, but no sign as yet of the rufous tail-tip. Upon the whole, the very large fine specimen under consideration, does not differ more from ordinary domesticated examples of the *Pig-tailed Monkey*, than does an unusually fine wild old male of the *M. rhesus* which I procured some time ago in this vicinity, from such domesticated specimens of the latter as must be familiar to the observation of most naturalists who are conversant with the study of mammalia. Capt. Phayre obtained these animals in a mountainous and rocky situation, and it is doubtless Dr. Helfer's second species of (so called) *Cercopithecus*. It belongs, indeed, (as does also *M. rhesus*;) to the division *Papio* of Mr. Ogilby, which comprehends all the short-tailed *Mucaci* of Cuvier; but

not, as I suspect, to the *Papio* of Prof. Owen,* which I have reason to believe applies to the long-tailed African Baboons, or the *Cynocephali*, Auctorum, exclusive of *C. mormon* and *leucophæus*, on the Mandrill and Drill: whereas the long-tailed *Macaci*, such as the next species, together with *M. radiatus* and *M. sinicus* of S. India, are referred by Mr. Ogilby to *Cercopithecus*. But the truth is, that if we once commence dividing the group *Macacus*, as now generally recognised, nearly every species of it might be selected as a subgeneric type *per se*, presenting various peculiarities of its own (e. g. *M. niger*, *nemestrinus*, *silenus*, *rhesus*, *cynomolgus*, *radiatus* with *sinicus*, and perhaps others with which I am less familiar): and I certainly much prefer the currently adopted system of restricting *Cercopithecus* to the numerous African species which want the fifth tubercle to the last inferior molar, and follow Mr. Martin in appropriating the name *Cercocebus* to those other long-tailed African species which are known as the *Mangabeys*, or white-eyelid monkeys, of which three have now been ascertained,—an arrangement which has the advantage of according with the geographical distribution of these animals, and by which, too, any of them may be classified at a glance at their exterior, by those who are familiar with the subject.†

M. cynomolgus (?) Though possessing living examples of both the *M. nemestrinus* and *M. cynomolgus*, I have found great difficulty in determining the skins sent by Capt. Phayre, which I refer to these species, in consequence of the mode of preparation of them, the skulls having been taken out, and the faces irreparably injured; but after full consideration, I feel confident that the present one is correctly assigned, if not the other also. A pair of skulls of this are sent, from which the following dimensions are taken. That of an adult male measures four inches and three-quarters in total length, inclusive of the protruding incisor-teeth; greatest breadth (of *zygomæ*) three inches; vertical height (including lower jaw) three inches and one-eighth; length of bony palate an inch and seven-eighths; breadth of ditto three quarters of an inch. The corresponding measurements of a female

* Mentioned in the *Report on British Fossil Mammalia*, published in the "Report of the British Association" for 1842, p. 55.

† If I mistake not, the tail is in *Cercopithecus* and *Cercocebus* of constant proportional length, being much longer than in any *Macacus*.

skull are—four inches and three-quarters, two and seven-eighths, three inches, one and five-eighths, and nearly three quarters of an inch. The upper canines of the male project nearly five-eighths of an inch from the bony socket. Capt. Phayre sent the following note respecting the habits of this animal. “These monkeys frequent the banks of salt-water creeks, and devour shell-fish. In the cheek-pouch of the female were found the claws and body of a crab”: accordingly, there can be little hesitation in identifying it with the other species of Dr. Helfer, to which the same habits were assigned.

Of the species of this genus, one only appears to inhabit Bengal, the *M. rhesus*, which is numerous in the Soonderbuns, where its habits I suspect pretty much resemble those of *M. cynomolgus*: it frequents thick jungly situations, particularly about the borders of narrow gullies, and to escape pursuit will sometimes plunge into the water from an overhanging tree, swim to some distance beneath the surface, and then land and make off on the opposite bank. The Hoonuman, on the contrary, would appear never to enter the water. The *M. rhesus* also occurs, as we have seen, even on the Himalaya so far westward as Simla, and Mr. Hodgson has sent it from Nepal, where I cannot help suspecting that (in different phases,) it constitutes both his *M. oinops* and *M. pelops*, *J. A. S. IX*, 1213; and it is included in Dr. Walker’s list of the mammalia of Assam, (*Calc. Journ. Nat. Hist. II*, 265,) together with another species discovered in that part by Dr. McClelland, and described as *M. assamensis* in *Proc. Zool. Soc.* 1839, p. 148. Still further to the N. W., “Monkeys” are stated by Elphinstone to be found only in the north-eastern part of Affghanistan: but no *Simiadae* are included in an elaborate paper on the mammalia of that country, prepared by Capt. Thos. Hutton for publication in this Journal, nor have I seen any subsequent notice of their occurrence in that vicinity. In the Indian peninsula generally, the common species of *Macacus* is the *M. radiatus*, being the only one included in the catalogues of Messrs. Sykes and Elliot; but *M. sinicus* is likewise found in the southernmost part and in Ceylon, as is also the *M. silenus*.

The following is a brief synopsis of the Indian species of *Simiadae*, with those of Assam, Arracan, and the Tenasserim provinces, as far as they are at present ascertained:—

1. *Hylobates syndactylus*; *Simia syndactyla*, Raffles. Stated by Helfer to extend as high as 15° N. Lat.

2. *H. lur.* Common in the Tenasserim provinces, and extending northward into Arracan, and southward to the Straits.

3. *H. hoolock.* Hill ranges of Assam, Sylhet, and Arracan.

4. *Semnopithecus entellus*, F. Cuv. Separate, apart, wider Bengal and Assam; Cuttack?

5. *S. anchises*, Elliot. Central table land of the Indian peninsula, and base of the western ghauts.

6. *S. schistaceus*, Hodgson. Nepal: the species of the western Himalaya perhaps different.

7. *S. priam*, Elliot. Coromandel coast.

8. *S. hypoleucos*, Nobis. Travancore and Malabar range.

9. *S. pileatus*, Nobis. Tipperah and Chittagong hills; Naga range.

10. *S. cephalopterus*, (Zimmerman). Ceylon and Neilgherries.

11. *S. obscurus*, Reid. (*S. cristatus*? Raffles.) Arracan, Tenasserim, extending southward to the Straits, and probably Sumatra.*

12. *Macacus silenus*. Ceylon, and neighbouring districts of the continent of India.

13. *M. nemestrinus* (?) Arracan, Tenasserim.

14. *M. rhesus*. Bengal, Assam, Nepal, Simla.

15. *M. assamensis*. Assam.

16. *M. cynomolgus* (?) Arracan, Tenasserim.

17. *M. radiatus*. Peninsula of India.

18. *M. sinicus*. Southernmost part of ditto, and Ceylon.†

Although I have here followed the usual order of classifying these three groups, I am nevertheless of opinion that the division comprising the *Cyncoepiali*, *Macaci*, and *Cercopithecii*, (*i. e.* the genera with cheek-pouches,) should precede that of the *Semnopithecii* and *Colobi* (or the genera with sacculated stomachs). The facial angle can no longer be considered as a guide to the relative elevation of these animals in the scale of being, now that the adult Orangs, for example,

* The *Semn.* (or *Presbytis*) *nobilis*, Gray, *Ann. and Mag. Nat. Hist.* 1842, p. 256, I cannot but regard as requiring confirmation as an inhabitant of India proper.

† This is doubtless the species noticed by Mrs. Graham in Ceylon, where that lady mentions "Swarms of red Monkeys playing in the trees overhead." (*Journal of a Residence in India*, p. 104.) I have reason to conclude also that this, and not the Lungoor, is the *Rollewai* of the Singhalese.

are known to present so very prominent a muzzle, while, on the other hand, the lowest of all the *Simiadae*, or the American Marmozets, have the same so inconsiderably developed; and it would seem that some trivial resemblance which the Semnotes bear to the Gibbons is now the chief inducement that occasions the former to be still placed next to the group of tail-less Apes, and thus to precede the third great division of old world Monkeys and Baboons, which is characterized by possessing cheek-pouches. But this third division unquestionably presents a nearer structural approach to the first than does the second; and, so far as I have observed, the intellect is also decidedly of a superior grade. I have next to describe an apparently new species of the African genus *Cercopithecus*.

Cercopithecus chrysurus, Nobis. This belongs to the particular minor group exemplified by *C. sabæus*, and would seem to be nearly allied both to that species and to the *C. tantalus*, Ogilby, *P. Z. S.* 1841, p. 33, the tail of which is stated in the Latin diagnosis to be yellow at tip, while in the more detailed vernacular description this is said to be "brown at the base, light grey at the tip." In the species now described, the terminal third of the tail is bright yellowish-ferruginous, as I believe in *C. sabæus*. The specimen is a male, and measures about nineteen inches from forehead to base of tail, the tail about twenty-four inches; from elbow to tip of hand nine inches, knee to heel seven and a quarter, and foot five inches. Colour grizzled yellowish-brown, the hair fine and soft at base, with the terminal half comparatively coarse and rigid, and broadly annulated first with black, then fulvous, and finally tipped with black; for the most part about two inches and a quarter long, but exceeding three inches on the sides towards the flanks: the whiskers, with the entire under-parts and inside of the limbs, are dingy yellowish-white: the fore-arm and leg greyer, or less yellowish than the parts above; and the hands and feet infuscated. Face almost naked, having only a few scattered hairs; but a narrow supercilium of long black hairs across the brow. The upper surface of the tail is rather darker than the back for the first two-thirds of its length, and then passes into bright yellowish-ferruginous, which on the under surface of the tail is continued nearly to its base, weakening however in intensity; the extreme tip of the tail is wanting in the specimen.

Length of the skull four inches and a half, and breadth across the *zygomæ* two inches and three-quarters; vertical height two inches and five-eighths; length of bony palate an inch and a half, and breadth seven-eighths of an inch. Habitat unknown.

Lemuridæ. The *Stenops gracilis* is usually assigned to Ceylon, and the *Nycticebus tardigradus* to Bengal. The latter, however, certainly does not occur in the lower part of Bengal, but may perhaps exist in the hilly regions. Dr. Walker includes it in his catalogue of Assamese Mammalia; and upon referring to the late Dr. Buchanan Hamilton's MSS., I find what I consider to mean this species, noticed as occurring in Chittagong, where it is said to be rare and solitary, inhabiting trees: in Rungpore, also, very scarce, and said to have been seen in the hilly countries to the south and east of the Boorhampooter by some natives, who recognised it by the Hindustanee name *Shiriminda Billi*; "bashful or shame-faced Cat," a name which I have also heard applied to it. The unobtrusive, nocturnal habits of this animal would, however, always cause it to be little observed. I believe that it is "the little *Bradypus*" of Dr. Helfer's 'Note on the Animal productions of the Tenasserim provinces,' being commonly designated "Sloth" by Europeans: and the territories eastward of the Bay constitute, I suspect, its chief habitat. A pair of the *Stenops gracilis* were offered to me in the Madras bazar, at the low price of a rupee; but I have seen no notice of this species as an ascertained inhabitant of the peninsula.* Here, in Calcutta, a dealer would ask at least ten rupees for a pair either of them or of the *Nycticebus*, and in all probability double as much.† They are, indeed, but seldom brought for sale in this emporium: and it is probable that the *Nycticebus*, if found at all in Bengal, occurs sparingly only a little within the confines of the province.

Vespertilionidæ.—The only Bat contained among Dr. Helfer's Tenasserim specimens was *Pteropus javanicus*, which, with *Nycticebus Temminckii*, he stated to be "amongst the rarer species found in the provinces"; and he alludes vaguely to other species of *Pteropus*, *Phyllostomus* (meaning probably *Megaderma*), and *Nyctinomus* (or

* It is included in Mr. Elliot's new catalogue of the mammalia of peninsular India.

† A pair of the *Stenops* said to have been brought from *Singapore*, have just been put up at auction at 60 Rupees! The *Nycticebus* is common in Arracan.

Dysopes). The Society has received *Pt. medius* (vel *Edwardsii*, Desm., apud Ogilby and others, though Edwards's specimen was from the Mauritius, and should therefore, I suspect, be the *Pt. edulis*,*) from Arracan, Tipperah, and Assam, where I cannot help considering the *Pt. assamensis* described by Messrs. McClelland and Horsfield to present merely an individual variation. The same appears to be Dr. Walker's opinion, as *Pt. Edwardsii* alone is included in his list of Assamese mammalia. Mr. Hodgson has also sent it from Nepal as his *Pt. leucocephalus* (*J. A. S.* IV, 700), together with the *Cynopterus marginatus* as his *Pt. pyrivorus* (*ibid.*), which latter has likewise been received by the Society from Assam and Arracan, and both of these species appear to be common throughout India; the former also doubtless constituting the large "Flying Fox" so abundant in the Maldives and Laccadives. The third Indian species of frugivorous Bat, *Pt. Dussumieri*, (of which a description will be found in XII, 176,) is still wanting to the Society's collection.

Of *Cynopterus marginatus*, I have been keeping three live females for several weeks. They are exclusively frugivorous, and take no notice of the buzz of an insect held to them; which I remark in reference to a statement of Mr. Gray, that the nearly allied little Kiodote is partly insectivorous: this I doubt very much. The *Cynopterus* is a very ravenous eater, and will devour more than its own weight at a meal, voiding its food but little changed as excrement, while still slowly munching away. Of guava it swallows the juice only (though a soft mellow fruit), opening and closing its jaws very leisurely in the act of mastication, and rejecting the residue. The flight of this Bat is particularly light and buoyant, far different from the measured rowing, the direct and heavy flight of the large *Pteropus*; but the general manners and the voice of the two are very similar.†

The other Indian *Vespertilionidæ* fall into three principal groups; viz

* The Mauritius species is styled *Pt. vulgaris*, v. *rubricollis*, Geoff., in *P. Z. S.* 1831, p. 45.

† After a while, the three caged females mentioned above attracted a male, who used to be continually hovering about their cage of an evening, and at length took up his diurnal residence hitching to a rafter above a dark staircase close by, where one of the females who escaped immediately joined him, and they continued to retreat there regularly for some days, when both were caught.

—*Rhinolophinae*, comprising the genera *Megaderma*, *Rhinolophus* and *Hipposideros*, and *Nycteris* (which at least is a Malayan genus),—*Dysopodinae*, including *Dysopes*, (with its various subdivisions, as *Cheiromeles*, &c.) *Taphozous*, and *Rhinopoma*,—and *Vespertilioninae*, or the ordinary Bats.

The *Megaderma lyra* appears to be a common species throughout India, and I have described its habit of preying on smaller Bats, first sucking their blood, in XI, 255. In reference to that paper, Mr. Frith informs me that a number of these Bats were in the habit of resorting to the verandah of his residence in Mymunseng, and that every morning the ground under them was strewed with the hind-quarters of frogs, and the wings of large grasshoppers and crickets: on one occasion the remains of a small fish were observed; but frogs appeared to constitute their chief diet—never toads: and of a quiet evening these animals could be distinctly heard crunching the heads and smaller bones of their victims. Other species of Bats were noticed to keep aloof from this retreat, but Mr. Frith had no opportunity of confirming my observation that the *Megaderma* preys upon smaller animals of its tribe. The disproportion of the sexes in the assemblages of this species in their diurnal retreats is noticed in XI, 600; and indeed I think that the same pretty nearly holds throughout the family. In Mr. Elliot's catalogue, the name *carnatica* is proposed, with a mark of doubt, for the *Megaderma* of S. India, which however is perfectly identical with that of Calcutta.

Rhinolophus, Geoff. and Cuv. In preparing a notice of the Indian species of this difficult genus, so far as I am acquainted with them, I labour under the considerable disadvantage of not having M. Temminck's valuable monograph to refer to; but I will nevertheless endeavour to review the history of the group, so far as the means at my disposal will permit of. The first endeavour at collating the species would appear to be that of M. Geoffroy St. Hilaire, in the 'Annales du Museum,' tom. XX, pp. 254 *et seq.* (1813). Four species are there noticed, in addition to the two common in Europe*; and among the former is a species from Timor, the *Rhinolophe crumènifère* of M.

* A third European species, found towards the South (in Dalmatia, Sicily, &c.,) also in the Levantine countries, and it would appear all Africa, is the *Rh. capensis*, Licht., *Rh. clivosus*, Rupp., v. *Rh. Geoffroyi*, A. Smith.

M. Péron and Lesueur, which I conceive to be erroneously identified with the *Vespertilio speoris* of Schneider, described to inhabit India, as it differs from the latter in its considerably larger size, and (it would seem) more rufous colouring.

In the second edition of Cuvier's 'Regne Animal' (dated 1829), these six species only are referred to: but Dr. Horsfield, in his 'Zoological Researches in Java' (dated 1824), had described seven (alleged) species as inhabitants of that island, two of which have since been brought together by Mr. Gray, after an examination of the original specimens collected by Dr. Horsfield,—*Rh. deformis*, Horsfield, being thus identified with *Rh. insignis*, Horsfield.

Then followed M. Temminck's Monograph of the genus, wherein (if I remember rightly) several species were added to those of his predecessors; of which, among perhaps others unnoticed in Mr. Gray's subsequent synopsis, I find mentioned by authors a *Rh. luctus*, Tem., from Java, an alleged rufous variety of which is described in the Zoology of the Voyage of *la Favorite*, from Manilla,—also a *Rh. pusillus*, from India, which appellation is referred with a mark of doubt to a specimen in the Zoological Society's Museum, in Mr. Waterhouse's Catalogue of the mammalia preserved in that collection,—where also is mentioned, but likewise with a mark of doubt, *Rh. insignis*, Horsf., from Ceylon.

Confining ourselves now to the describers of Asiatic species*, Col. Sykes, in the Proceedings of the Zoological Society for 1831, describes a *Rh. dukhunensis*, distinguishing this from the *Rhinolophe crumèniifère* of Péron and Lesueur, which, it is added, is the *Rhin. marsupialis* of M. Geoffroy's lectures, and the *Rh. speoris* of M. Desmarest, by its much smaller size, &c.; but this smaller size corresponds with the original description of *Vesp. speoris* from India, the colour of which is however stated to be "pale yellowish ash-brown" (apud Shaw), which does not apply well to either, though better to that of India: and I have little doubt that Col. Sykes's species is the true *speoris*, to which *dukhunensis* would therefore be referred as a synonym, as likewise the subsequent names *apiculatus*, Gray, for the male, and *penicillatus*, Gray, for the female.

* The form is peculiar to the Old World, inclusive however of Australia (apud J. E. Gray).

Mr. Hodgson, in the Society's Journal for 1835, next described a *Rh. armiger* and *Rh. tragatus* from Nepal; but the former of these appears to be identical with the Javanese *Rh. nobilis* of Horsfield. The same naturalist more recently obtained three other species from that province, and has described one of them by the name *perniger*, in *J. A. S.* XII, 414; but I suspect that this is identical with *Rh. luctus* of Temminck.

We now come to Mr. Gray's "Revision of the genera of Bats, and descriptions of some new genera and species," published in the 'Magazine of Zoology and Botany,' No. XII. In this paper the *Rh. vulgaris*, Horsf., is mentioned as inhabiting India, and besides the *Rh. apiculatus* and *Rh. penicillatus*, Gray, both of which I have referred to *speoris* verus v. *dukhunensis* of Sykes, two other species from India are described as new, from specimens procured by Walter Elliot, Esq., Madras C. S., and these are also given in the latter gentleman's valuable "Catalogue of the Mammalia of the Southern Mahratta country," published in the 'Madras Journal of Literature and Science,' No. XXIV, pp. 98-9, one of them however by a different and more appropriate name.

Such appears to be the amount of information hitherto published relative to the Indian *Rhinolophi*, which I shall now proceed to reduce and classify, and enrich by the addition of several new species.

The various Indian and Malayan members of this group fall into two marked divisions, corresponding to *Rhinolophus*, Gray, as restricted, (the *Noctilio*, apud Bechstein, according to Mr. Gray,) and the *Hipposideros*, Gray, v. *Phyllorhina*, Bonap., apud Gray.

The former is exemplified by the three European species, and by the Javanese *Rh. affinis* and *Rh. minor*, Horsf., in addition to which only two species are indicated by Mr. Gray, the *Rh. megaphyllus*, Gray, (*P. Z. S.* 1834, p. 52,) from Australia, and *Rh. griseus*, Meyer, habitat not ascertained. In this group, the facial crests are more prominently developed, and terminate in an angular peak above, within and anterior to which is a second leaf of membrane, in general also peaked, and attached behind by a vertical (*i. e.* longitudinally disposed) connecting membrane, which last is sometimes developed beyond the lesser transverse leaf, in front of it, and each undergoes considerable modification in the various species: the nasal apertures appear linear,

from being partly overlapped by membrane, which lines and surrounds the centre of the facial depression, between the latter and the nostrils ; outside of the nostrils the face is bordered by a layer of membrane surrounding it in front in shape of a horse-shoe. The ears in this group are large, ample, and apiculated, having the point directed outward, and (as Mr. Hodgson remarks of the *Rhinolophi* generally,) are “ tremblingly alive all over :” the conch is continued round in front to form an anti-helix, which is separated apart by an emargination, sometimes very deep, but should not be confounded (as it occasionally has been) with the *tragus* of various other Bats. As many as six species inhabit India, all of which (unless *Rh. pusillus* be among them) seem different from those heretofore described.

The first is remarkable for having a conspicuous transverse leaflet with a septum behind and above it, situate upon the larger or posterior peaked membrane, and considerably above the lesser or anterior one ; but this is only a modification and development of what is more or less observable in the others. The posterior peak reaches to between the ears and even beyond.

1. *Rh. mitratus*, Nobis. Length four inches, of which the tail measures an inch and a half ; of another specimen three inches and one-eighth, the tail an inch and a quarter. Expanse (of the former) probably twelve inches ; length of fore-arm respectively two and a quarter, and two and one-eighth ; of longest finger three and one-eighth, and three inches ; of tibia an inch ; and tarse with claw, half an inch. Ears large and ample, measuring an inch to point anteriorly, the anti-helix moderately developed, but separated apart by only a slight emargination. Fur of the upper-parts a rich light brown, paler at base, excessively soft and delicate, and rather long ; of the under-parts shorter and much paler. Anterior nose-leaf subovate, or nearly rounded, contracted at base, and a conspicuous lappet of membrane is given off from each side of the centre of the facial depression, overhanging the nostrils, and forming a round mesial cup ; vertical membrane posterior to the lesser nose-leaf little developed, and supporting its base only ; the uppermost or hindmost peak triangular and acute at tip, reaching beyond the base of the ears between the two, and divided by a mesial septum, but little overlapped at base by a second small transverse lamina which occurs also in most of the other species, and is placed

beyond and above the vertical membrane which supports the inner or anterior nose-leaf. This fine species was procured by Capt. Tickell in the neighbourhood of Chyebassa, in Central India.

2. *Rh. perniger*, Hodgson, *J. A. S.* XII, 414.* Distinguished by its large size, and delicately soft and long, curly, blackish fur, having a slight ashy cast from the hairs being thus tipped. A fine specimen which I saw in Dr. Griffith's possession, from Cherra-Poonjee (Sylhet), and which has since been forwarded by him to the museum of the Hon'ble Company in London, measured five inches from muzzle to extremity of foot. The only example now before me is too much injured about the head to permit of a description being taken of the peculiarities of its facial membranes; and Mr. Hodgson's account, excepting as regards size and colouring, applies, for the most part, to the species generally of the present subgroup. The length of the forearm in the latter specimen (which was presented to the Society by Mr. Hodgson,) is two inches and three-quarters, and of tibia an inch and three-eighths. Inhabits the central region of the sub-Himalayas.

3. *Rh. trogatus*,† Hodgson, *J. A. S.* IV, 699. This species was so named in reference to the development of its anti-helix, as compared with the very slight indication of one traceable in *Hipposideros armiger* (v. *nobilis* ?); but the appellation is far from being felicitous, as the anti-helix (not tragus, as indeed was duly pointed out by Mr. Hodgson,) is less developed than is usual in the present subgroup. Mr. Hodgson described this Bat to be "uniform deep brown, with the tips paler and rusty;" but two of three specimens sent by him are certainly of a light brown, and one of them, more particularly, has the upper parts tipped with dull maroon, which produces a general shade

* Probably the *Rh. luctus*, Tem., of which I can get no description, though Mr. Gray alludes to it as stated to be black with an ashy tinge; vide 'Annals and Magazine of Natural History' for 1842, p. 257, where Mr. Gray describes a *Rh. morio* from Malacca, Singapore. "The front central lobe of the nose-leaf large, three-lobed; fur reddish-brown. Very like *Rh. luctus* in general appearance, and perhaps the colour may have changed by the specimen having been taken from spirits." Why therefore impose a new name, or at any rate why not put a mark of doubt after the word *morio*, and add *Rh. luctus*, Tem., var.? Most probably this is the *Rh. luctus*, Tem., var. *rufus*, from Manilla, of MM. Eydoux and Gervais, in the Zoology of the Voyage of *la Favorite*.—*Rh. luctus* is described from Java.

† Misprinted *torquatus* in Mr. Gray's "Revision."

of this colour, as in several other species both of *Rhinolophus* and *Hipposideros*. The central nose-leaf is small and narrow, and a little expanded at the summit; the nasal orifices are fringed externally with a lappet of membrane; and the uppermost peak of the membrane, above the nose-leaf, is inconspicuous, being almost concealed by the fur of the forehead. Length of fore-arm two inches and a quarter, and of tibia an inch and one-sixteenth. Inhabits the central region of Nepal.

4. *Rh. macrotis*, Hodgson, MS. This and the two succeeding species are of small size, and one of them may perhaps be the doubtfully cited *Rh. pusillus* of Mr. Waterhouse. In that now under consideration, the anterior nose-leaf approaches in form to that of *Rh. tragatus*, but is proportionally larger and wider, nearly twice as long as broad, and rounded without expanding at the summit, which is scarcely so high as the pointed tip of the posterior vertical membrane that connects the nose-leaf with the face; behind or above this again, are three successive lappets of membrane, the first of them incomplete, and the last or hindmost peak is obtusely pointed: the nareal orifices are oblong, or rather kidney-shaped, with no lappet of membrane bordering their outer side, but the usual horse-shoe-shaped development overhangs the upper lip. Mr. Hodgson describes the species as follows:—"General structure typical? No pubic teats. Distinguished by the large size of the ears, which are longer than the head, broad, oval, with pointed recurved tips, and large obtusely rounded-second ears [anti-helix]. Colour sooty-brown, much paler and dusky-hoary below.* Snout to base of tail an inch and three-quarters; head three-quarters of an inch: ears from antea base fifteen-sixteenths of an inch; interval of ears a quarter of an inch: tail three-quarters of an inch, completely enveloped in the square membrane: arm an inch; fore-arm an inch and a half; longest or second finger two inches and five-sixteenths: femur eleven-sixteenths; tibia the same; expanse nine and three-quarters; weight one-third of an ounce. Habitat Nepal." The following are the dimensions of one of the

* This description does not apply, however, to the specimens with which Mr. Hodgson has favored the Society, and which are of a light earthy olive-brown (one of them verging on isabelline), and paler below.

specimens presented to the Society by Mr. Hodgson. From muzzle to base of tail an inch and five-eighths, the tail exceeding five-eighths; ears anteally five-eighths; fore-arm an inch and five-eighths; longest finger two inches and a quarter; tibia exceeding five-eighths of an inch; and foot with claws three-eighths.

5. *Rh. subbadius*, Hodgson, MS.; mentioned as *Vespertilio subbadius*, H., in *J. A. S.*, X., 908. In this species, the anterior nose-leaf is very small, oblong, and rounded above, but the vertical membrane behind it is conspicuously developed, and pointed posteriorly; behind this again, is a short and broad transverse membrane, divided into two lateral lobes, and as usual some long straight hairs grow from this part; and lastly, there is the hindmost angular peak, the sides of which are slightly emarginated towards the point: the nostrils are not externally fringed with membrane; and over the lip is the usual horse-shoe. Mr. Hodgson thus describes the species:—"No pubic teats. Ears no longer than head, truncated at tip [or rather, they are somewhat obtusely pointed], ovoid. Nasal appendage quadrate, not salient, with a transverse bar nearly surmounting it towards the head. Colour a medial clear brown, paler below, and especially on the head and face. Snout to vent an inch and a half; tail an inch and a quarter; head five-eighths of an inch; ears the same; expanse seven and a half: fore-arm an inch and a quarter; longest finger two and a quarter; the foot and nails three-eighths of an inch. Habitat Nepal." The admeasurements of a specimen presented by Mr. Hodgson are—muzzle to vent an inch and a quarter; tail five-eighths of an inch; head the same; ears anteally half an inch; fore-arm an inch and three-eighths; longest finger one and seven-eighths; tibia nearly five-eighths of an inch; foot and nails five-sixteenths of an inch. Inhabits Nepal.

6. *Rh. lepidus*, Nobis. A good deal allied to the last, but distinguished by its much paler colour, longer fore-arm, and especially by the uppermost and hindmost peak of the facial membranes being much less evenly angular, having its sides so considerably emarginated towards the tip, that the latter appears as a narrow terminal prolongation, one-sixteenth of an inch in length; the vertical membrane posterior to and adjoining the anterior nose-leaf is also still more developed and

obtusely angulated behind; and there is a slight fold of membrane exterior to the nostrils. Ears large, and of the usual form, measuring nearly five-eighths of an inch from antea base to tip, and having a well developed anti-helix. General hue pale isabella-brown, the fur of the upper parts tinged with dull maroon towards the tips, imparting a shade of that colour; under-parts still lighter, and the fur shorter: membranes apparently dark. Length an inch and three-quarters; of tail half an inch more; and extent about nine inches: forearm an inch and five-eighths, longest finger two and a quarter, and tibia above five-eighths of an inch. The specimen (in spirits), and an injured skin of apparently the same species, were both probably obtained in the vicinity of Calcutta.

Hipposideros, Gray. This seems a perfectly distinct group, characterized by a totally different form of facial crest from that observable in the preceding series. The general form of this is quadrate, surmounted by a short and broad transverse membrane recurved along the edge, and over this, in the males (I suspect always,) is a round sinus or cavity with a transverse semicircular opening. "This cavity," remarks Mr. Elliot, "the animal can turn out at pleasure, like the finger of a glove; it is lined with a pencil of stiff hairs, and secretes a yellow substance like wax. When alarmed, the animal opens this cavity and blows it out, during which it is protruded and withdrawn at each breathing. Temminck notices it under the name of a syphon, or purse, in *Rh. insignis* and *Rh. speoris*" (apud Geoffroy)*. The entire facial crest has been well compared by Mr. Hodgson to "a coat of arms, with double field"; the superior and inferior fields separated by a trilobate fleshy ridge, below which are situated the nostrils in a deep cavity, surrounded by the membrane which forms the lower field, both within and exterior to which are, in some species, additional laminæ of membrane. The ears in this group are, in general, less apiculated, and sometimes rounded, and the conch is not continued round to form an anti-helix.

* It is probable that the development of this sinus, and also of the throat-sac of the *Taphozoi*, depends much on season, like the infra-orbital cavities of various ruminants and analogous glandulous follicles in many other animals.

Some have a more complex membrane surrounding the nostrils, and three small lateral fringes of membrane exterior to the nose-leaf.

1. *H. armiger*, (Hodgson), *J. A. S.* IV, 699. Very closely allied to, if not identical with, *H. nobilis*, (Horsfield). I cannot, however, perceive that "the hairs of the axilla, hypochondria, and scapular marks, are nearly white," as stated of the Javanese species. Colour uniform light brown, with dark maronne tips to the fur of the upper-parts. Length of fore-arm (of a large specimen) three inches and five-eighths, and of tibia an inch and a half. Inhabits the central region of Nepal.

2. *H. larvatus*, (? Horsfield). A species which I have little hesitation in identifying with this, has the fur of a brighter ferruginous than is represented in Dr. Horsfield's two figures, and the under-parts more particularly are much deeper-coloured than would appear from the second figure of the plate adverted to. The fur of the upper-parts is vivid fulvous, more or less tinged with maronne upon the back, and weaker towards the base of the hairs; that of the under-parts being somewhat less intense: membranes dusky, but it would seem tinged with the prevalent hue of the fur. Length about four inches, of which the tail measures one and a quarter: fore-arm two inches and a half; longest finger three and a quarter; tibia an inch and one-sixteenth; foot with claws five-eighths of an inch: ears angulated, measuring anteally seven-eighths of an inch to tip, and three-quarters of an inch broad, length of head an inch. Both in this species and the last there is a minute false molar anterior to the carnassier in the upper jaw, which appears to be wanting in those which follow. Inhabits Arracan, whence forwarded to the Society's Museum by Capt. Phayre, to whom we are likewise indebted for the next species.

3. *H. vulgaris*, (? Horsfield); a species mentioned by Mr. Gray as inhabiting India. It differs from the last in being rather smaller, and of a brown colour above, much paler at the base of the hairs and at their extreme tips; and lighter-coloured below: the ears more apiculated, or rather they appear so from being strongly emarginated externally towards the tip: the tail and interfemoral membrane would likewise seem to be shorter, but the latter has been withdrawn from

the skin in the dry specimen before me, which, as before mentioned, was received from Arracan. Length of fore-arm two inches and a quarter, and of tibia an inch; ears anteally three-quarters of an inch, and nearly as much broad.

4. *H. speoris*: *Vesp. speoris*, Schneider, but evidently not of M. Desmarest, which is *Rh. marsupialis* of M. Geoffroy's lectures, founded on the *Rhinolophe crumenifère* of Lesson and Lesueur: *Rh. Dukkunensis*, Sykes, *P. Z. S.* 1831, p. 99: *H. apiculatus*, Gray, the male, and *H. penicillatus*, Gray, the female, *Mag. Zool. and Bot.* No. XII. For description, vide Elliot, in *Madras Jl.* No. XXIV, 98. Colour nearly as in *H. armiger* (*v. nobilis*?): length of fore-arm two inches, and of tibia an inch. Inhabits Southern India.

This species is approximated to *H. insignis*, (Horsf.) in Mr. Gray's paper, and it may be the doubtfully cited *H. insignis* from Ceylon of Mr. Waterhouse's Catalogue of the Mammalia in the Zoological Society's Museum.

Others have the facial crests altogether less complicated, and no fringes of membrane exterior to the nose-leaf.

5. *H. fulvus*, Gray, *Mag. Zool. and Bot.*, No. XII; *Rh. fulgens*, Elliot, *Madras Jl.*, No. XXIV, 99. This is perhaps the most vividly coloured of the whole class of Mammalia; at least I know of no species which can at all compete with it for brilliancy of hue. The colour of the fur is here alluded to, for that of the naked skin of the Mandrill and of certain *Cercopithec*i can scarcely be surpassed. The general tint of the fur is splendidly bright ferruginous, that of the upper-parts being slightly tipped with a darker shade; membranes dusky. Length, according to Mr. Elliot, an inch and nine-tenths, of tail nine-tenths of an inch; expanse ten inches and a half: weight 4 dr. 20 gr.: fore-arm an inch and five-eighths; longest finger one and a half; tibia three-quarters of an inch; foot (minus claws) a quarter of an inch: ears anteally eleven-sixteenths of an inch, and the same across; their form scarcely apiculated. Inhabits Southern India, where very rare.

6. *H. murinus*, Gray, *ibid.*; *Rh. murinus*, Elliot, *ibid.* This I have not yet seen, but shortly expect some specimens from Mr. Jerdon, who informs me that it is common at Nellore. It closely resembles the

last in all but colour, but has the crest-membranes still less developed. Colour dusky-brown, paler beneath. Inhabits Southern India.

Taphozous. Three new species of this genus have been described by me in *J. A. S.*, X, 971 *et. seq.*; and in XI, 784, I verified and gave a more detailed notice of the *T. longimanus*, Hardw., *Lin. Tr.* XIV, 525, and distinguished the species which I had previously referred with doubt to *T. longimanus*, by the appellation *T. Cantori*. This last mentioned Bat I have not again obtained in the neighbourhood of Calcutta, but have received a specimen from Mr. Jerdon, procured in the vicinity of Nellore (on the Coromandel coast), where it would appear to be not uncommon. This species is easily recognized by its flatly out-lying ears, recurved tail, little developed gular sac, and by the whiteness of the base of its fur, which shews conspicuously.

Another species from Southern India is my *T. brevicaudus*, which is at once distinguished from all the other known species by the shortness of its tail and interfemoral membrane. The specimen was from Travancore.

Since my description of *T. longimanus* was published, I have had several fresh specimens, and very recently obtained thirteen alive (of which two only were males) from the interval between a pillar and the wall against which it was placed. Five others escaped. These Bats clung with perfect facility to the smooth mahogany back of a cage into which they were put, hitching their claws in the minute pores of the wood, and creeping upon it in a manner that was surprising. The females were each about to give birth to a single offspring (early in August). Their size was remarkably uniform, both sexes measuring four inches and a quarter from snout to tail-tip, by sixteen and a quarter in alar expanse; the tail protruding half an inch: nostril not closed, but having a valvular kidney-shaped orifice, and tremulous, as observable in various other Bats, (for instance, the *Cynopterus marginatus*.) The variation in colour was not great, nor had it any relation to sex; but one or two were more hoary-tipped, imparting an ashy appearance, and one only was marked with yellowish or fulvous.

I have also procured in this vicinity specimens of my *T. fulvidus*, and supply the following description of a recent male that was shot early one

morning, in bright day-light, creeping upon the stem of a palm. Length, to end of tail, four inches, the membrane extending three-quarters of an inch further ; tail seven-eighths of an inch, and (as usual) wholly retractile within the membrane ; alar expanse fifteen inches ; length of fore-arm two and three-eighths ; tarse an inch ; foot and claws half an inch. General colour slightly grizzled chesnut-brown, purer on head and neck, the abdominal region covered with shorter hair, weakly infuscated, and less tinged with chesnut ; axillary part of the membrane, from between the elbow to the flank inclusive, covered with longer and whitish hairs. Face, ears, and membrane, washed with dusky ; the portion of membrane between the hind-leg and proximate finger narrowly edged with whitish. One specimen purchased of a bazar shikarree is so much darker, that before I had obtained a good series of *T. longimanus* I had some doubt whether it ought not to be referred to that species ; and such an example may have been the original *longimanus* of Hardwicke, described as of a snuff-brown colour : but this name had better now remain as I have appropriated it. In general, the present species is of a tolerably bright chesnut hue. Like the preceding one (to which it is closely allied), the male has a very large throat-sac, the ears bend upwards, and the tail is straight and rigid, not recurved as in *T. Cantori*, and also as in the following species. The specimens which I formerly described had been long soaked in spirit, which seems to have discharged the colour from the face and membranes, and one of them which I have had taken out and stuffed, has the under-parts more uniformly coloured, the longer hair upon the membrane towards the axilla, and that of the abdomen, scarcely differing in hue from that of the breast ; whereas in the recently procured examples here described, the difference of colour in these parts is very conspicuous.

T. crassus, Nobis. This is a well marked species, having the recurved tail of *T. Cantori*, and ears bending upwards as in *longimanus* and *fulvidus*. It is particularly distinguished by its blackish colour, and the broad dull white margin of the membrane between the tibia and proximate finger, this margin increasing much in depth as it recedes from the finger-tip, and merging gradually into the black of the rest of the membrane, becoming at first mottled with the latter.

Length to end of tail four inches, the membrane reaching five-eighths of an inch beyond ; tail three-quarters of an inch, the terminal five-sixteenths protrusile and recurved : expanse fifteen inches and a half ; fore-arm two and five-eighths ; first phalanx of longest finger two and a half ; tibia an inch ; foot large, measuring with claws eleven-sixteenths of an inch : the sac little developed. Ears five-eighths of an inch apart at base anteriorly. Fur of the upper-parts black, or dark blackish-brown, a little hoary at the tips, and light brown at the extreme base ; under-parts inclining to ashy-black, and more grizzled ; membranes dusky, with the exception of the whitish margin described. On the particular specimen before me, are some pure white dashes on one side of the back, being traces of partial albinism. The nostrils appear to be quite closed by a valve, which would open at the will of the animal. Taken at Mirzapore, and presented to the Society by Major. R. Wroughton, to whom it is also indebted for examples of the *Rhinopoma*, and for numerous other interesting specimens.

T. pulcher, Elliot. A species from Southern India, recently discovered by Mr. Elliot, who informs me that it is "black-brown above with white pencillings, and pure white below." That naturalist will give a more detailed description of it in the Madras Journal.

Rhinopoma. From descriptions with which I have been favored, I had long felt satisfied that a Bat of this genus inhabited the renowned *taj* at Agra, where great numbers of them would seem to exist ; and there can be little doubt that the species is that marked *Rh. Hardwickii*, Gray, from India, in Mr. Waterhouse's catalogue of the stuffed specimens of Mammalia in the Zoological Society's Museum, and also that likewise referred to *Hardwickii* in Mr. Elliot's catalogue of the Mammalia of the Southern Mahratta country, as being found in old ruins to the eastward of that province. But a specimen in the Society's collection received from England, and said to be African, differs in no respect that I can perceive, and comparing both with the figure of *Rh. microphylla* in the national French work on Egypt, the only difference arises from what I presume is an inaccuracy in that figure ; viz. that the caudal vertebræ are not represented to be sufficiently elongated. Even on comparison of the skulls together, and with that figured by M. Geoffroy, I have been unable to detect any

diversity worthy of notice. The following description is drawn up from specimens received from Agra and Mirzapore. Entire length, (of a full grown male,) to end of the long slender tail, five inches and a half, the latter passing the membrane by two inches and a quarter; expanse twelve inches and a half: (length of a female five inches, by eleven inches in expanse:) fore-arm two inches and a quarter; longest finger two and three-quarters; tibia an inch and a quarter; foot with claws five-eighths of an inch; ears from base anteally seven-eighths of an inch, posteally half an inch, and width of the joined pair, from tip to tip, an inch and seven-sixteenths. Fur very fine and delicate, its general colour a soft dull brown, paler at base, where inclining towards albescent; the face, rump, and abdominal region naked, the skin of the rump corrugated, and together with the face and membranes dusky, having a tinge of plumbeous; the skin of the arms underneath, and of the belly and nates inferiorly, is transparent, the latter covering an enormous accumulation of fat, which above reaches over the loins and along the spine. Nostrils closed and valvular, forming obliquely transverse slits in the truncated muzzle: the claws conspicuously white.

Dysopes. I know of but one Indian species of this genus, which is the *Vespertilio plicatus* of Buchanan Hamilton, *Lin. Trans.* V, 261; the *Nyctinomus bengalensis* of M. Geoffroy; and I am inclined to regard the *D. murinus* of Hardwicke's published drawings as no other, indifferently represented. I was favored with a live specimen of this animal by Mr. Ridsdale, of Bishop's College Press, and lately obtained another which flew in at a window: Mr. Masters also has presented the Society with a stuffed one: all of these being much of a "snuff-brown" colour, the fur of the under-parts tipped paler: but there is an old specimen of what may perhaps be another species in the museum, the fur of which is remarkably close and velvety, and very dark fuliginous-brown above, with a shade of maronne, the under-parts similar but paler and somewhat reddish. So far as I can judge from the state of the specimen, it presents, however, no structural characters at variance with those of the other, that can warrant its being distinguished as a species; but I yet suspect that it

is a different species from the *plicatus*.* The affinity of this genus for *Taphozous* is very apparent in the living or recent specimens, the present group having even the same peculiar mode of folding the wings, which is not the case even with *Rhinopoma*, wherein there is merely a tendency or inclination to that particular mode of duplicature of the wings.

* It is probably the Malayan *D. tenuis*, v. *Nyctinomus tenuis*, Horsfield.

Proceedings of the Asiatic Society for the month of JUNE, 1844.

Wednesday Evening, the 5th JUNE, 1844.

The Monthly Meeting of the Society was held at the usual hour on Wednesday evening, the 5th June, H. Torrens, Esq. Vice President in the chair.

The following list of books presented and purchased, was read :—

Books for the Meeting of the Asiatic Society, June 5, 1844.

1. Meteorological Register for the month of April 1844, from the Surveyor General's Office.
2. The Oriental Christian Spectator for May 1844, No. 5, 2nd series.—Presented by the Editors.
3. Journal of the Agricultural and Horticultural Society of India, Vol. II, No. XI, 1844.—Presented by the Society.
4. Annals and Magazine of Natural History, Vol. XII, No. 76 for 1843.—Purchased.
5. Proceedings of the Academy of Natural Sciences of Philadelphia, Nos. 30, 31, 32 and 33.—Presented by the Society.
6. The Athenæum, for March 16th and 23rd, 1843.—In exchange for the Society's Journal.
7. Report of the Secretary of the Navy U. S.—Presented by M. R. Johnstone.
8. Magnetic Observations from the Observatory of Bombay.—Presented by Government.
9. Goodwyn's Memoir on Wrought Iron Roofing, with a Vol. of Plates.—Presented by the Author.
10. Brief Grammatical Notice of the Siamese Language, with an Appendix, by T. Taylor Jones.—Presented by the Author.
11. Notes on the Marine Glue, by Alfred Jeffries.—Presented by Mr. J. De Garnier.
12. L. Asie Centrale ; Recherches sur les chaines de Montagnes et sur la Climatologie, Vols. 1, 2, and 3, par A. de Humboldt.—Presented by the Author.
13. Pearl Fisheries of Ceylon, by J. Stewart.—Presented by C. B. Greenlaw, Esq. in the name of the Author.
14. Napier's Peninsular War, Vols. 3, 4, 5, and 6.—Purchased.

15. Letters à G. de Tassy, on Sugat, &c. de sa Notice Institute Saadi, par M. Newbold.—Presented by the Author.

16. Saadi, Auteur des Premières Poesies Hindoosthani, par G. de Tassy, 1843.—Presented by the Author.

The Vice-President and Secretary stated with reference to Napier's Peninsular War, that as the Library contained many incomplete works, he would suggest that he be authorized, as occasions might present themselves, to complete such works. This was unanimously agreed to. He also noticed in terms of approbation, the valuable work of Mr. Stewart, on the Pearl Fisheries of Ceylon, a work undertaken, as he had been informed, from motives of public utility alone, and most creditable both in its design and execution.

Read the following letter from the Under-Secretary to the Government of India:—

No. 1093 of 1844.

From W. EDWARDS, Esq. Under-Secretary to the Government of India, to the Secretary to the Asiatic Society.

Foreign Department.

SIR,—By direction of the Governor General in Council, I have the honor to transmit to you, for such notice as the Society may deem it to merit, the accompanying report, by Captain Jacob, on the general condition of the Province of Kattywar, and on various points of information, chiefly of a geographical and statistical nature connected with that province.

2. It is requested you will return the document when no longer required.

I have the honor to be, Sir,

Your obedient Servant,

Fort William, the 25th May, 1844.

W. EDWARDS,

Under-Secretary to the Government of India.

Read letter from the Under-Secretary to the Government of Bengal, according free freight on the Government Steamers, for two boxes of books for the Education Committee, N. W. P.

Read the following letter from the Curator, Zoological Department:—

To the Secretary of the Asiatic Society.

SIR,—I beg to lay before the Society a request of Mr. J. E. Gray, of the British Museum, contained in a private letter to myself, that I would procure for him certain specimens procurable in this vicinity, for which he offers to pay a sum not exceeding £30 annually, to cover the expences of procuring and preparing of them, while the

cost of transmitting such to London will be defrayed by the British Museum. Should the Society approve of my undertaking the superintendence of such collections, the specimens might either be prepared by the Society's taxidermists, during the hours of their non-attendance at the Museum, or an additional taxidermist might be employed for the purpose, upon a salary deducted from the sum suggested by Mr. Gray.

I have also to request, on the part of Mr. Jerdon, that he may be allowed to publish figures of certain of the Society's birds in the course of his work, now in progress, upon Indian Ornithology; leaving it to me to make a selection for the purpose. I beg to recommend that Mr. Jerdon's offer to do so, be entertained by the Society, as our collection contains a very considerable number of species which it is most desirable should be figured, and could well spare as many as Mr. Jerdon could possibly require.

I wish to call the attention of the Society to the desire of certain Anglo-Indian youths, to be apprenticed to the Society for three or more years, in order to be taught the art of taxidermy. The difficulty which I have hitherto experienced in procuring such youths to assist in the Museum is considerable, and their usefulness is shewn by the large collection of skins now upon the table, most of those sent by Captain Phayre, having been prepared by a lad instructed at the Museum, with whom I furnished him, and who was employed by the Society in Arracan upon a salary of 5 Rupees a month, upon which terms two other lads are at present engaged, one on board the *Tenasserim* merchant-vessel, which at this time is on the coast of New Guinea, where I expect that many specimens will be collected, and the other is with Capt. Abhatt at Ramree. The terms of apprenticeship required, on the part of the lads, who have now applied to me, are 3 Rupees a month for pocket-money, and a suit of clothes annually, which I understand is an usual mode of making such contracts in this country. Should the Society approve of such an arrangement being made with one or more of these youths, I should be glad of their assistance at the Museum immediately, where there is a variety of work upon which they might be at once employed.

I am, Sir,

Yours obediently,

ED. BLYTH.

June 5, 1844.

After some conversation it was settled, that the Curator of the Zoological Department, British Museum, be invited to address the Asiatic Society of Bengal officially, and that Mr. Blyth be also requested to address the Secretary, and to communicate with the Sub-Secretary fully in detail on the subject of the proposed apprentices. Mr. Jerdon's request was acceded to, but with the special proviso, that he should also be invited to address the Society officially, and that while all birds sent to him should be duly reported and recorded in the Society's Proceedings, he should also undertake on his part duly to acknowledge them in his forthcoming work as *from* the Society's Museum.

Read the following letter from M. Jules Mohl, Assistant Secretary to the Société Asiatique de Paris, addressed to the Sub-Secretary:—

Société Asiatique.

SIR,—I beg to acknowledge the receipt of your letter of the 14th of September 1843, by the *Gabrielle*, containing a ship-letter of a box of Manuscripts of the Vedas. I have sent the ship-letter to Marseilles, and expect every day to receive the box. I am charged by the Society to offer to you and to Ramcomul Sen, the Society's best thanks for your care and kindness.

The sudden death of M. Cassin, our agent, has imposed upon me the duty of examining all the papers relating to the Society, and to your Society's depôt of books. I have made out the account, and am this moment occupied in making the list of books in the depôt. I will report on it next month; until now I have found all in a satisfactory state. Unfortunately I have not yet found the lists of books which you had sent, and which M. Cassin ought to have bought for your Society; but as I have not yet been able to look over all the papers, I am in hopes of finding them yet, and of executing your instructions.

You mention in one of your letters, that 64 copies of the Index of the Mahabharat have been sent last year, we have received a parcel containing 64 copies of an Index to the 4th Vol. but none of the three 1st volumes. Has no Index to these been published?

I have the honor to be, Sir,

Your respectfully,

JULES MOHL,

Paris, 7th March, 1844.

Secrétaire adjoint à la Soc. As.

Ordered, that the Indices to Vols. 1st, 2d and 3d of the Mahabarata be dispatched to the Paris Society.

Read the following letter from Captain D. Williams, 1st Assistant to the Commissioner of Arracan:—

MY DEAR SIR,—I have the pleasure to inform you that, in searching for gold coins on the Island of Chedooba, of which I forwarded a couple to you, the natives have dug up a large bar of iron resembling the shank of an anchor. I have had it brought to my house, and shall have much pleasure in forwarding it to the Society if commanded to do so. On the spot also were found the two Javelin heads I sent to you, and mentioned in your Journal, No. CXLII, of 1843.

It may throw some further light towards the discovery of what country and age the gold coins belonged to.

Yours faithfully,

Ramree, 8th March, 1844.

D. WILLIAMS.

P. S.—Since writing the above, I had an opportunity of sending the bar of iron or shank to Kyook Phyo, to meet the *Amherst* for conveyance to Calcutta to your address.

The iron grapnel shank, for such it evidently is, herein referred to, is now placed on the right of the northern entrance to the portico of the Museum.

It is in tolerable preservation, though none of the grapnel claws are remaining. It measures six feet in length, but the circumference cannot be ascertained, as it is covered over with shells and an arenaceo-calcareous incrustation. It may have belonged to some European or Arab Vessel a century or more ago, and have possibly been elevated with the beach on which it was found. It cannot have belonged to the people by whom the gold coins were struck, for those betoken far too rude a state of the arts to admit of such a bar of iron having been forged, or been in use on a ship at the epoch when such coins were used.

Read the following letter from Baboo Gooroprasad Roy :—

The Secretary to the Asiatic Society.

SIR,—I have to beg that you will do me the honor to submit to the Asiatic Society, the accompanying specimen pages in type and Manuscript of a Sanscrit Dictionary in the Bengallee character, to be entitled the *Sobda Ratnakar*, and which will I presume be found of the greatest utility to Native Students of that language, and of much interest to Philologists and Scholars in general. In testimony of its merits, I further beg leave to submit the opinions of it, hereto annexed, both from Native Pundits and European gentlemen of high and acknowledged talent. The MSS. is completed, and can be sent to press.

Your Society, Sir, cannot but be aware that a work like this, though it has cost many years of assiduous labour, cannot be printed without a heavy outlay which I am, from straitened circumstances, unable to afford. The most careful estimates which I can make, supported by the opinion of Dr. Hæberlin, carry the expence of the work to Co's. Rs. 8,000 for 500 copies, requiring a subscription of 160 copies at 50 Rs. each, to assure the Printer against loss.

I have therefore, Sir, respectfully to solicit that the Asiatic Society of Bengal will be pleased to accord to me such measure of patronage and support and recommendation as they may deem my labours to merit, and I beg to assure it, that no attention on my part shall be wanting to render the work by care, while passing through the press, creditable to its support.

I have the honor to be, Sir,

Your obedient servant,

GURUPRASAD ROY.

This letter was accompanied by certificates from various European Orientalists and Native Pundits in favour of the work. The Sub-Secretary stated, that the work had been brought to his notice by a learned Native friend, and one of the oldest members of the Society, who was also himself author of by far the most valuable Bengallee and English Dictionary which had yet appeared, Dewan Ramcomul Sen, and that desirous that the author of the *Sobda Ratnakar* should appear before the Society, with a

statement sufficiently definite as to the business part of the matter to enable it to consider his application at once, he had referred him to Dr. Hæberlin, who had kindly examined the work, whose opinion and letter on the subject was as follows :—

H. PIDDINGTON, Esq. *Sub-Secretary of the Asiatic Society.*

MY DEAR SIR,—I have examined the MSS. of the Sanscrit Dictionary in Bengali characters, compiled by Bábú Guruprasad Roy, which you sent for my inspection; and I am of opinion that the work, if printed, would be of great use to Bengalee (Native) Students of Sanscrit, although in a critical point of view, and for European Scholars, its value can of course not be compared with Wilson's 2d edition. This Dictionary of Guruprasad's appears, however, to have been compiled with much care, and great labour has evidently been bestowed upon it. There are many more words in it than in Wilson's, and some really of importance; the explanations, too, are pretty full, and under each principal vocable all Sanscrit Synonymes are given in alphabetical order. Hence the work seems well adapted to Native (Bengali) Students, in as much they are accustomed to the mode observed in this work.

A similar work to this is in course of publication by R. Radhukanta, but the latter will fill 6 large 4to. volumes, and even then is not accessible to the public; and contains scarcely one-half of the vocables given in Guruprasad's; the former will when completed, be more for advanced scholars, the latter is adapted to students in general.

I think therefore, I might safely recommend the work in question to the favorable consideration of the Asiatic Society, not however for their adoption, but simply to assist the author in publishing the work. Indeed I think this belongs rather to the province of Government and the Council of Education, than the Asiatic Society. The Dictionary is not so much for the learned, as for the people of Bengal; it is for the educated Natives of this country, whether acquainted with English or not.

To print this Dictionary would require a considerable outlay. As far as I can judge, the work could not be sold under rupees 50, and if 150 copies were subscribed for by Government, the Council of Education, the School Book Society, and the Asiatic Society, there is no doubt that a Printer might be found to undertake the work. I hope something will be done towards the accomplishing of this object.

Believe me yours truly,

Calcutta, 8th May, 1844.

(Signed) J. HÆBERLIN.

The Vice-President then addressed the meeting, stating, that while there could be no doubt on the one hand that the work was likely to be one of very considerable utility to Bengalee Students of Sanscrit, it was on the other evidently not of that high classic order which the Society had been hitherto wont to patronize to a large extent. He therefore suggested, that the Society should subscribe for 25 copies (1,250 rupees,) and strongly recommend the work as an educational one to the attention of Government in that Department.

After some conversation, it was determined that it should be left to the Committee of Papers to settle the number of copies to be subscribed for, and to frame the recommendatory letter to Government on the part of the Society.

Read the following letter from Dr. W. Griffith, Acting Superintendent Honorable Company's Botanical Garden, which had been overlooked at the former meeting, from having slipped into the portfolios of drawings :—

No. 22.

From W. GRIFFITH, Esq. Officiating Superintendent of the Hon'ble Company's Botanical Garden, to H. TORRENS, Esq., Secretary to the Asiatic Society, dated 9th April, 1844.

SIR,—In obedience to instructions received from the Under Secretary to the Government of Bengal,

<p>Animals, 37 Reptiles, ... 18 Unfinished, ... 1 Birds, 345 Fishes, ... 137 Unfinished drawings apparently originals, ... 18 Copies of Birds made by Dr. Wallich, 22 Ditto of Fishes made by ditto, several to be recognised in the Illustration of Indian Zoology, 20 Total,..... £07 Two volumes of Manuscript.</p>	<p>I have the pleasure of forwarding to you the Buchanan Manuscripts and Drawings, as per margin. I shall be obliged by your furnishing me with a receipt for the same. Amongst them will be found many copies substituted for originals, and also many duplicate copies It appears to me that these, especially the last, may lead to the discovery of the manner in which so many of these drawings have been copied in General Hardwicke's Illustrations of Indian Zoology, so far as I know, without any acknowledgment (except in the case of a few turtles) of the source whence they were derived, and I am sure that the Asiatic Society will consider the object of its being the custos of these drawings in a great measure fulfilled, if it is enabled to do justice to that very eminent person, the timely publication of whose labours, would have superseded to a great degree the labours of Messrs. Hodgson, Blyth and Jerdon.</p>
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I have the honor to be, Sir,

Your most obedient Servant,

Hon'ble Company's Botanic Garden, 9th April, 1844.

WILLIAM GRIFFITH,
Officiating Superintendent.

Dr. McGowan, of the American Missionary Hospital at Ningpo, presented an Inscription from a Tablet in a Buddhist Monastery at Ningpo, of which the characters, though supposed to be Buddhistical, were unknown to the learned in China, whether Natives or Europeans, and had been pronounced here as not being of any recognised form of the Thibetan. The Inscription was handed to the Editors of the Journal for early insertion.

Dr. McGowan also kindly offered to take charge of the impressions from the Ningpo bell, and to inform the Society if the remaining parts were worth the trouble of cleaning and taking off.

The following report was then read for the month of May Curator Museum Economic Geology.

REPORT OF THE CURATOR MUSEUM OF ECONOMIC GEOLOGY AND GEOLOGICAL AND MINERALOGICAL DEPARTMENTS, FOR THE MONTH OF MAY, 1844.

Our recommendation to Government, that the site of the Lithographic stones discovered by Captain Shortreed, as noticed in my reports of *Museum of Economic Geology*. November and December last, has it would appear, been forwarded to the Honorable the Governor of the N. W. Provinces, and in reference to it, we have to place upon record, the following letter received from Captain Stewart, B. N. I, Fort Adjutant, Chunar:—

Copy, No. 462.

From J. THORNTON, Esq. Secretary to Government, N. W. P., to Captain STEWART, Fort Adjutant, Chunar.

SIR,—I am desired to forward to you the accompanying copy of a letter from the Secretary General Department, Asiatic Society regarding Lithographic stones, said to have been found near Rewah.
N. W. P.

2d. The Lieutenant Governor has been given to understand, that you have been already engaged in inquiries regarding stones of this description in the neighbourhood of the Soane, and will feel glad if you can undertake to prosecute the search which Captain Shortreed has indicated. Any moderate sum which you may consider necessary to enable you successfully to conduct the inquiry, will be immediately placed at your disposal.

I have, &c. &c. &c.

(Signed) J. THORNTON,
Secretary to Government, N. W. P.

(True Copy,)

W. M. STEWART.

Agra, the 13th May, 1844.

To J. THORNTON, Esq. Secretary to the Government N. W. P., Agra.

SIR,—I have the honor to acknowledge the receipt of your letter No. 462 of 13th instant, forwarding for my information a copy of a letter from the Secretary of the Asiatic Society to the Secretary to Government of India, Home Department, regarding the possibility of obtaining supplies of stone fit for Lithographic purposes from the Rewah State, and communicating the wishes of the Lieut. Governor, that I should undertake to prosecute the search.

In reply, I have the honor to state, that I shall have great pleasure in meeting the wishes of the Lieut. Governor, and have no doubt from the discoveries already made, coupled with the information contained in Mr. Torrens's letter, of being able to accomplish the desired end.

I shall with his permission place myself in immediate communication with Mr. Torrens, forward for his inspection specimens of stones from situations where they have already been discovered, and obtain from him such further information as may enable me to follow up the discovery already made by Capt. Shortreed.

Specimens of genuine white lias, exactly corresponding in appearance with the best German stone, have already been procured from the bed of the Soane river, at a place situated between 50 and 60 miles S. W. of Chunar. The experiments made with them failed, owing to the softness and friable nature of the stones submitted for trial, which were unable to resist the pressure applied to them. They were however quarried from the surface, and as Mr. Torrens remarks that the best German stone is usually found with beds of inferior quality both above and below, I feel assured that a little expenditure in digging deeper will lead to the discovery of the proper kind.

I shall forward a contingent bill to you for the sanction of the Lieut. Governor, for any small expences that may be incurred in making the researches, and have to request, that you will

cause directions to be forwarded to the Steam Agent at Chunar, to receive from me free of any charge for freight, any packages containing stones I may have to forward to Calcutta for experiment.

I have, &c. &c. &c.

(Signed) W. M. STEWART, *Captain,*

Fort Adjutant.

Chunar, 20th May, 1844.

(True Copy.) W. M. STEWART.

To H. TORRENS, Esq. Secretary to the Asiatic Society, Calcutta.

DEAR SIR,—I have the pleasure to annex a copy of a letter to my address from the Secretary to the Government N. W. P., with my reply, dated 20th instant, by which you will observe, that I have undertaken to prosecute the search for Lithographic stone in Rewah, as suggested in your letter to the Secretary to the Government of India, Home Department, dated 14th March last.

I have this day dispatched a party to the quarry in which white lias has already been discovered, with directions to cut right through the stratum from which the stone has hitherto been quarried to ascertain whether it may not be found of a closer and firmer texture underneath.

The experiments with this stone alluded to in my letter to Mr. Thornton, were made in the Lithographic press attached to the Office of the Sudder Board of Revenue N. W. P. then at Allahabad. They were quarried close to the surface, and as the experiments, although unsuccessful in obtaining a good impression, shewed that the stone was of the proper kind, I think it well worth while to search further before pronouncing it to be a failure.

I shall forward specimens of the stone to your address per Steamer as soon as I receive them, which will probably be in the course of a month. In the meantime I will be obliged by your obtaining from Captain Shortreed precise directions, whereby the locality from whence he obtained the specimens forwarded to you, may be correctly ascertained; I shall thus be able in the cold weather to follow up the discovery alluded to in your letter to Government, should the present experiment prove unsuccessful.

I have to request you will inform me under what official designation I may be able to correspond with you in the matter under discussion. "On the public service," I am not aware whether or not I can do so, as Secretary to the Asiatic Society. I remain, Dear Sir,

Chunar, 24th May, 1844.

Your's faithfully,

W. M. STEWART.

P. S.—I will thank you to forward me at your leisure a few small specimens of German stone of different kinds, to enable me to compare them with those found here.

We have replied to Captain Stewart, directing his attention also to any traces of organic remains which the formations in that locality might afford, and forwarding by dawk banghy specimens of German stone for comparison.

From Mr. Jas. Dodd, Assistant Assay Master, we have to acknowledge two very handsome specimens of the matrix of the Gold of the Real del Monte Mines, and two of Copper Ores from Cuba.

Major Alexander, B. A., has obliged us with a few specimens of copper ores and iron and pyrites, some of which will be of use as duplicates for exchanging, and one or two will find a place in our Cabinets. Capt. Goodwyn, B. E., has added to our library of reference by his valuable work on iron roofing, already noticed amongst the donations of books, but which should have its place in this report also, as being one day to become a text book for this important application of a mineral with which India so much abounds. It may not have been noticed, but it should be so, for

it is important as a step in Indian typography, that the numerous diagrams in this work are intercalated with the text as if they were wood cuts! though evidently lithographs, and of course far superior to type-metal cutting. Upon enquiry of Mr. Huttman, of the Govt. Gazette Press, by whom the work is printed, he informs me that they *are* lithographs, and that they were so inserted by first printing off the sheet with the necessary blank spaces, and then sending the wet sheets to the lithographers who printed in their share. This arrangement is highly creditable to the contriver of it, and a most valuable hint to all who may like ourselves feel the absence of the art of wood-cutting, in illustrating papers relative to the arts or sciences.

For all the foregoing communications and presentations, the best thanks of the Society were voted.

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